GRAIN & FEED JOURNALS CONSOLIDATED

Vol. LXXVI. No. 8 Chicago, Ill., U. S. A., April 22, 1936 Price $2.00 Per Year. 25 Cents Per Copy

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

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Butter Color an Index to Vitamin A

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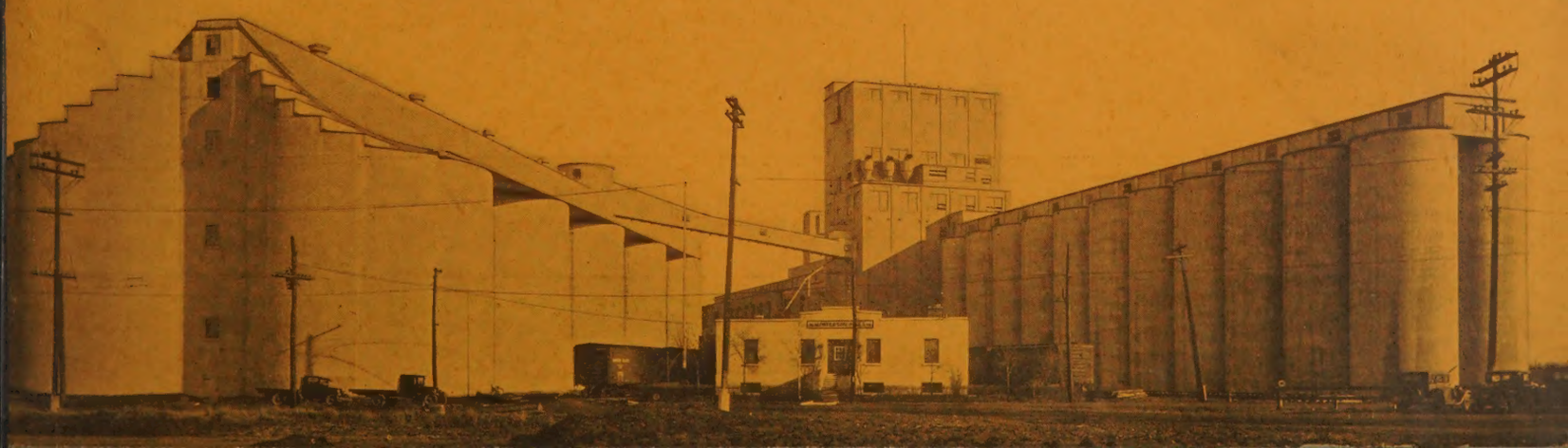

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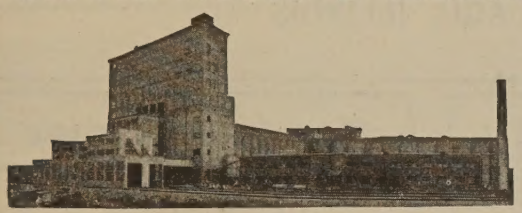

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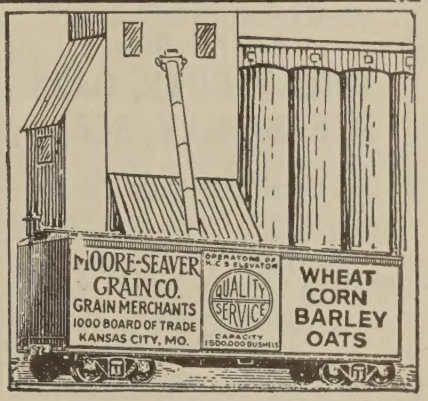

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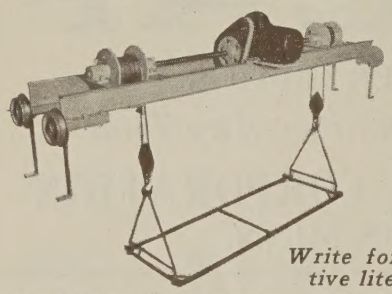

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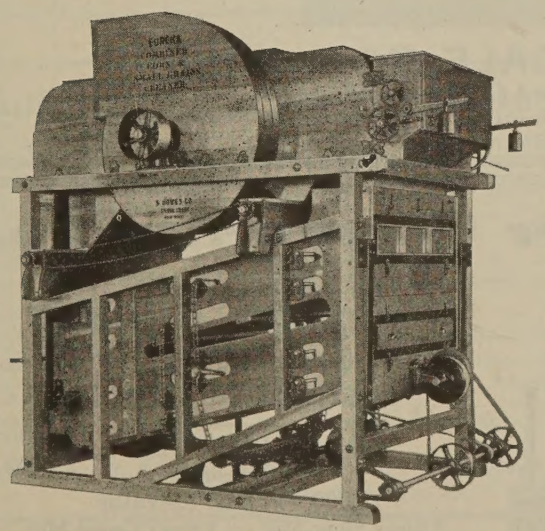

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Why two cleaning machines in your house when one only will answer perfectly for all cleaning of wheat, barley, or small grains, oats, corn, etc. Quick shifts from one to any other kind of cleaning; big savings in power, space and operator's time are assured every owner of this *newest* and *best*, this more economical "Eureka-Combined" Cleaner. Our bulletin No. 135 tells why this unique, profit-making machine has become so popular in up-to-date elevators.

S. HOWES CO., Silver Creek, N. Y.

GRAIN ELEVATOR BUILDERS

HORNER & WYATT

Engineers

Designers of Grain Elevators and Feed Mills

Power Problems a Specialty

470 BOARD OF TRADE KANSAS CITY, MO.

ZELENY

Thermometer System

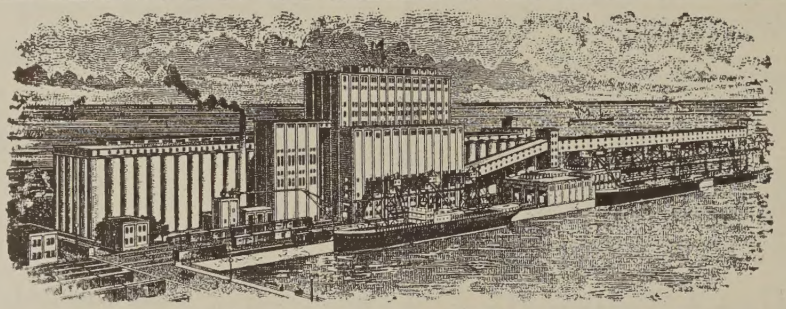
Protects Your Grain

Estimates cheerfully given.
Write us for catalog No. 6.

Zeleny Thermometer Co.

542 S. DEARBORN ST. CHICAGO, ILL.

Capacity 5,000,000 Bushels



Equipped with Four Stewart Link-Belt Grain Car Unloaders

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

W. R. SINKS, PRESIDENT
Phone Harrison 8884

JAMES STEWART CORPORATION
ENGINEERS AND CONTRACTORS
FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

H. G. ONSTAD
VICE-PRES.-GEN'L MGR.

Santa Fe Elevator "A"

Kansas City, Kans.

Capacity
10,500,000 Bushels

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105 W. Adams St., Chicago
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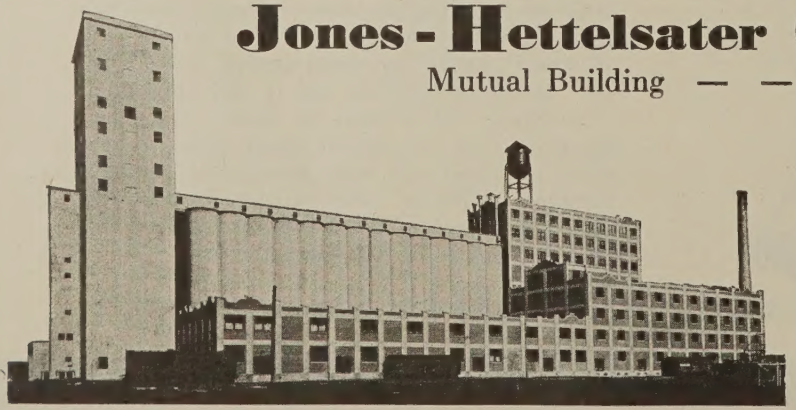

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Mutual Building — — Kansas City, Mo.

Designers and Builders
Grain Elevators
Feed and Flour Mills

Pillsbury Flour Mills Co.
Springfield, Ill.
1,000,000 bus. Elevator
8 Story Flour Mill — 4 Story Cereal Mill
2 Story Warehouse
designed and constructed by us under a single contract.

GRAIN ELEVATOR BUILDERS

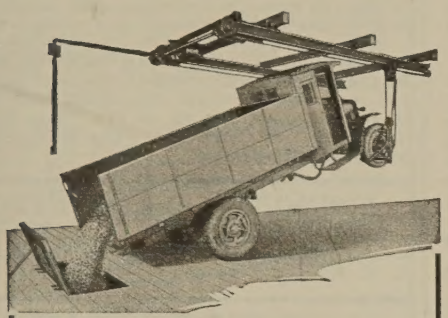
The Barnett & Record Company

DESIGNERS MINNEAPOLIS, MINN. *BUILDERS*

Grain Elevators — Mill Buildings — Industrial Plants

McMillin Truck Dump

For Electrical Power



The above dump represents the outcome after years in the business of manufacturing of Truck Dumps. In the endeavor to make a dump which would fill the desires of hundreds of elevator owners, each having different ideas. This is why we can honestly say that we now have a dump that will satisfy 99% of unbiased grain elevator operators.

Consider its installation, cost, efficiency, handiness and speed.

Address

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525 Board of Trade Bldg.,
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WE SPECIALIZE

In Modernizing Country Elevators

Our recommendations will cost you nothing. When do you wish us to submit estimates on remodeling your grain-handling facilities?

THE VAN NESS CONSTRUCTION CO.
Grain Exchange Omaha, Neb.

WE REPAIR

Concrete Structures and Moisture Proof by
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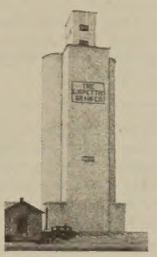
WE BUILD
GRAIN STORAGES

29 Years' Experience
Send us your inquiries
POLK GENUNG POLK COMPANY
Fort Branch, Indiana



Concrete Costs No More

Let us prove it. Plans and estimates on your needs made cheerfully.

CHALMERS & BORTON
Designers & Builders
28 E. 1ST ST. HUTCHINSON, KAN.

HOGENSON

Construction Co.
Designers and Builders
Elevators, Feed Mills, Warehouses
REMODELING
Corn Exchange Bldg. MINNEAPOLIS, MINN

You Can Sell Your Elevator

by advertising directly to people who want to buy, by using a

Grain & Feed Journals For Sale Ad

T. E. IBBERSON CO.

GRAIN ELEVATOR BUILDERS

Feed Mills Coal Plants
Repairing and Remodeling

MINNEAPOLIS MINNESOTA

Coon Rapids, Ia.—I have taken the Journals for 23 years and could not get along without it.—William Grettenberg, Wm. Grettenberg Grain Co.

Duplicating Scale Ticket Book

A labor saving scale ticket book in which the buyer keeps a carbon copy of the entries made on every scale ticket issued, so altered or spurious tickets may be readily detected.

This book contains 200 leaves, 100 white bond, machine perforated leaves bearing 800 tickets of form shown, interleaved with 100 blank manila sheets. Supplied with 4 sheets of No. 1 carbon paper, size 8½x11 inches. Order Form 62. Price, $1.45, f. o. b. Chicago. Weight, 3 lbs.

Cash with order for twelve books earns 10% discount.

_____ 19____

Bought of _____

Load of _____

Price_____per cwt. Gross_____lbs.

Price_____per bu. Tare_____lbs.

Driver—On. Off. Net_____lbs.

Net_____bu.

_____ Weigher.

One-fourth actual size.

GRAIN & FEED JOURNALS Consolidated
332 So. La Salle St., Chicago, Ill.

Repair Your CARLOADER

with parts manufactured especially for that particular loader; they fit better and wear longer than those made by the local tinsmith. We have original patterns for all repair parts for all loaders, including the Old King, Mattoon, Kelso, old-style Boss and the present model.

Buy standard parts only. To save time send a rough sketch, giving complete dimensions of the part, with your order.

The Pneumatic Grain Machinery Corp.
Dayton, Ohio
Manufacturers of the BOSS and KELSO Carloaders and Grain Cleaners

Your Message

Let the Grain & Feed Journals Consolidated your message bear, To progressive grain and feed dealers everywhere.

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

CENTRAL INDIANA—Elevator, feed mill and residence for sale cheap; good grain and clover section. 76E12 Grain & Feed Journals, Chicago.

On the other end of the Journal's "Wanted—For Sale" columns you will find 9,000 grain dealers anxious to know what you have for them.

ILLINOIS—On account of death of partner 24,000 bu. electrically equipped elevator for sale; own land; served by C. B. & Q. and T. P. & W. R. R. Chas. E. Henry, Bushnell, Ill.

STOP! READ! THINK! One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now.

MINNESOTA—125,000 bus. iron clad frame cleaning and transfer elevator for sale, electric power, fast handling, good cleaner equipment, Northwestern road, a good transit point, and in good barley territory. Real bargain price Banner Grain Co., Minneapolis, Minn.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

COLORADO—8000 bu. capacity grain elevator, warehouses and coal sheds for sale. Equipped for grinding grain, cleaning and storing beans. A good wholesale and retail business in the Platte Valley Agricultural and cattle feeding district. Located at a junction point of the U. P. R. R. at La Salle. C. S. Boulter, Manager, La Salle Elevator Co., La Salle, Colo.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

ELEVATORS FOR SALE

Whenever there is a real opportunity of interest to the grain trade, it is usually registered in the "Wanted—For Sale" columns of the Journal.

NO. CENTRAL ILL.—30,000 bu. modern reinforced concrete elevator for sale on private land served by C. & N. W. R. R. Coal sheds and room for other sidelines. A prosperous business in 300,000 bu. corn and oats territory. Good schools. Owner wishes to retire. Write 76F1,

SOUTHEASTERN WYO.—25,000 bus. grain elevator in a good town and a good location for sale or lease. Owner has been sick and unable to attend to business for some time. Would like to sell if possible. Price and terms reasonable. W. O. Eaton, Torrington, Wyo.

ELEVATORS WANTED

WANT TO RENT Illinois elvtr.; give terms, capacity and description of what you have. Write 76H5 Grain & Feed Journals, Chicago, Ill.

WANT TO RENT OR buy 20 to 30,000 bushel elevator in Eastern South Dakota, Southwestern Minn., or Northwestern Iowa. Write 76E20, Grain & Feed Journals, Chicago, Ill.

A 100,000 TO 200,000 bushel elevator wanted, located in good barley section of Montana, Minnesota or Wisconsin. Write 76G13, Grain & Feed Journals, Chicago, Ill.

IF YOU DO NOT find the elevator you want advertised, place your wants in the "Elevators Wanted" section and you will receive full particulars regarding many desirable properties not yet advertised.

MILLS FOR SALE

ILLINOIS—Modern feed mill equipped with up-to-date machinery for sale. Located at Chatsworth, Ill. Write to Corn Belt Elevator, Fairbury, Ill.

SITUATION WANTED

WANT POSITION managing elevator; 20 yrs. exper.; references; go anywhere. Write 76E10, Grain & Feed Journals, Chicago, Ill.

HELP WANTED

WANTED—Salesman experienced in country grain elevator and feed grinding machinery, particularly for Southern Minnesota and Iowa territory. Address 76H14, Grain & Feed Journals, Chicago, Ill.

MAN WANTED, 25 to 35 years of age, with grain handling experience, must know merchandising and a good judge of grain. State qualifications in general, references and salary. Write 76H7 Grain & Feed Journals, Chicago, Ill.

COMPETENT AND EXPERIENCED elevator managers, foremen, bookkeepers, auditors, second men and solicitors can easily and quickly be found through an ad in the "Help Wanted" column of the Grain and Feed Journals, Consolidated, Chicago, Ill.

BUSINESS OPPORTUNITIES

KANSAS—A going feed and seed business for sale, a moneymaker; stock equipment and bldg. C. E. Kennedy, Anthony, Kans.

SEEDS FOR SALE

SEED OATS—Seed Barley—All varieties. Lowest prices on quality seed. Boulay Bros. Co., Fond du Lac, Wisconsin.

Your RADIO MARKET *Record*

A boon to the grain dealer who keeps a convenient, permanent record of market quotations for ready reference.

This form provides convenient spaces for hourly quotations on Wheat, Corn, Oats, Rye, and Barley. A week on a sheet, and a year's supply of sheets in a book.

Order Form CND 97-5.
Price, $1, plus postage. Shipping Weight, 1 lb.

Grain & Feed Journals
Consolidated
332 S. La Salle St. Chicago, Ill.

Modern Methods

Grain & Feed Journals
CONSOLIDATED
332 So. La Salle St., Chicago

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order to keep posted on modern methods of elevator management, I wish to receive the *Grain & Feed Journals Consolidated* semi-monthly. Enclosed find Two Dollars.

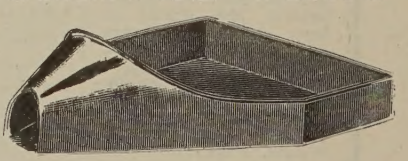
Name of Firm.....

Capacity of Elevator ..... bushels

Post Office.....

State .....

SAMPLE PANS



Formed by bending sheet aluminum, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of aluminum will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½x12x16½", $2.00; Seed Size, 1½x9x11", $1.65, at Chicago.

GRAIN & FEED JOURNALS
Consolidated
332 So. La Salle St., Chicago, Ill.

Receiving Books For Grain Buyers

Wagon Loads Received. A good form used extensively in recording wagon loads of grain received from farmers. Tare weight is entered immediately under gross to facilitate subtraction. Contains 200 pages of linen ledger paper, and is ruled 20 lines to a page, thus accommodating 4,000 wagon loads. Separate pages may be devoted to each kind of grain to each farmer, or wagon loads may be entered in the order received. Well bound in cloth, with keratol back and corners. Order Form 380. **Price $2.50. Weight 2¾ lbs.**

Receiving and Stock Book for keeping a record of each kind of grain received in separate columns, so buyer may easily determine total amount of any kind of grain on hand. Size 9¼x11⅛, 200 pages, with a capacity for 4000 wagon loads. Well printed on linen ledger paper, bound in strong board with leather back and corners. Order Form 321. **Price $2.50. Weight 2¾ lbs.**

Scale Ticket Copying Book contains 150 leaves of scale tickets, four to a leaf. Each leaf folds back upon itself, so that with the use of carbon paper, it will make a complete copy of the original on the stub, with one writing. Original tickets forming the outer half of leaf are machine perforated. Printed on bond paper, check bound, size 9½x11, supplied with four sheets of carbon. Order Form 73. **Price, $1.30. Weight 2 lbs.**

Grain Scale Book, a combined Journal and Receiving book with index. Each man's grain is entered on his own page, or a page may be allotted to each kind of grain received. Both debits and credits are posted to the ledger. Contains 252 numbered pages and index, size 10½x15½, and will accommodate 10,332 wagon loads. Printed on linen ledger, bound in extra heavy black cloth covers, with leather back and corners. Order Form 23. **Price $4.00. Weight 5 lbs.**

Grain Receiving Register is designed for recording the receipts of wagon loads of grain. Loads may be entered in consecutive order, or different sections of the book may be devoted to different kinds of grain. Book contains 200 pages of linen ledger paper, size 8½x14 inches, each of which is ruled for 41 entries, giving a total capacity of 8200 wagon loads. Well printed and substantially bound in full canvas. Order Form 12AA. **Price $2.50. Weight 3 Lbs.**

Duplicating Wagon Load Receiving Book, designed to facilitate the recording of number of loads from one farmer in a short time. Book contains 225 leaves, size 12x12 inches with 33 lines each, perforated down the middle; the inside half of the leaf remains in the book, and the outer half with the same ruling printed on the reverse side, folds back over the left half with carbon between. Outer half is given to farmer. It may also be used by line agents in making daily reports to headquarters. Check bound with canvas back, nine sheets of carbon. Order Form 66. **Price $2.60. Weight 4½ lbs.**

Grain Receiving Ledger, may be used first as a Stock Book by posting the receipts daily, weekly or monthly from some other portion of this book, or from any other scale book, giving a page to the commodity handled; Second, as a patrons' ledger, by giving a full or half page to each patron; Third, pages may be used to enter each load of grain received in consecutive order under their respective commodity headings. The book contains 200 numbered pages with 44 lines each, and marginal index in front, size 8½x13¾, ruled with the usual column headings, including Debit and Credit columns. Printed on linen ledger paper and well bound in black cloth sides with keratol back and corners. Order Form 43. **Price $3.00. Weight 2½ lbs.**

Form 43XX contains 400 pages same as above. **Price $5.00. Weight 4½ lbs.**

All Prices are for Chicago Delivery. Postage Extra.

Printed and Supplied by

Grain & Feed Journals Consolidated
332 South La Salle St. Chicago, Ill.

MACHINES FOR SALE

CORN CUTTER & Grader—has motor—used very little. 76D6 Grain & Feed Jrnls., Chicago.

GOOD USED SPROUT Waldron ear corn crusher for sale. Hilbert Elevator, Hilbert, Wis.

A GOOD BUY—Manlift 50' high, also truck dump for sale. W. W. Pearson, West Point, Ind.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 76D3 Grain & Feed Journals, Chicago, Ill.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 76D5 Grain & Feed Journals, Chicago, Ill.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 76D7 Grain & Feed Journals, Chicago, Ill.

HAMMER MILL with direct-connected 50-h.p. motor, piping and meal collector complete; excellent condition. Also 50-bu. cap. oat huller. Cedar Falls Mills, Cedar Falls, Iowa.

DREADNAUGHT CORN crusher for sale, 24" Dreadnaught attrition mill with 40-h. p. Howell motor, two elevator legs 20 ft. over all, one 7½-h.p. Fairbanks Morse motor. Kawkawlin Bean & Grain Co., Kawkawlin, Mich.

MOTORS FOR SALE

BARGAINS—100-h.p. Fairbanks-Morse slip-ring, 1750 r.p.m., motor in first class condition. Also Jay-Bee No. 5 belt-driven hammer mill. Farmers Co-op. Elevator Co., Ackley, Ia.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at $2.35 per hundred or 500, $10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

RAT EXTERMINATOR

RAT LUNCHES—Kills rats and mice without poison. Ready to use. Just lay them out. Endorsed by agricultural authorities. $1 large package—$3.50 a carton prepaid. Salesmen-Distributors wanted. Rat Lunches Co., Carroll, Ia.

MACHINES WANTED

A USED CAR puller wanted in good condition. Corray Bros., Urbana, Ill.

USED 8-IN. MAGNETIC separator wanted to connect with high line. Write Hilbert Elevator, Hilbert, Wis.

WANT TO BUY oat huller, small to medium capacity. P. O. Box 7, Commerce Station, Minneapolis, Minn.

A GOOD USED NO. 16 clipper clover seed cleaner wanted, with or without motor. C. G. Wolf, North Liberty, Ind.

HAND OR MOTOR operated freight elevator wanted, ½ or 1 ton cap., for 2-sty. whse. Write details. W. H. Herrmann Gr. Co., Shabbona, Ill.

BLUE STREAK 15 or 20-h.p. hammer mill with magnetic separator wanted, rebuilt, in first class condition. Kawkawlin Bean & Grain Co., Kawkawlin, Mich.

ENGINE WANTED

GOOD USED 35-H.P. Oil Engine Wanted. M. A. Current, Catlin, Ill.

50-H.P. GASOLINE or kerosene engine wanted. Write Willowdell Grain & Feed Co. (Willowdell), R. R. Yorkshire, Ohio.

ENGINES FOR SALE

110-H.P. MILLER-WATT gas engine for sale; 1st class condition. Miller gas engines well known heavy-duty engines of moderate speed with compression in accordance. We will erect this engine on your foundation and grant payment terms. This is a good buy. Hanley Milling Co., Mansfield, Ohio.

SCALES FOR SALE

STANDARDIZED Grain Testing outfit for sale, similar Fairbanks No. 11192; rebuilt, but will guarantee as good and accurate as new. $50 f.o.b. Dallas. The Dillon Scale Repair Co., 2014 N. Lamar St., Dallas, Tex.

FOR SALE—1 15 ton 18x9 Fairbanks type S dump scale with steel; 1 50-ft. 100 ton heavy duty Howe railroad scale without steel; each A-1 condition with recording beam. Dillon Scale Repair Co., 2014 N. Lamar St., Dallas, Tex.

SCALES WANTED

GOOD USED 10 or 15 ton wagon or truck scale wanted. State particulars and price. W. C. Ulmer, Marion, Ohio.

Scale Ticket Copying Book

Contains 600 original and 600 duplicates of form shown herewith. Four originals and four duplicates to each leaf. Printed and perforated so outer half of sheet bearing originals may be folded back on the duplicate, thus giving an exact reproduction of all entries on the original. Leaves are machine perforated between tickets so they may be easily removed without tearing. Printed on bond paper, check bound, in heavy board covers, size 9½x11 inches, and supplied with 6 sheets of No. 1 carbon. **Order Form 73. 150 pages. Price $1.30, plus postage.** Weight, 2¼ lbs.

No.______ ______19____
Load of ______
From ______
To ______
Gross______lbs.
Price per bu.______ Tare______lbs.
Test ______ Net______lbs.
Man ON—OFF Net______bu.
______Weigher

(Three-Fourths Actual Size)

Cash with order for twelve books earns 10% discount.

Send all orders to

Grain & Feed Journals Consolidated
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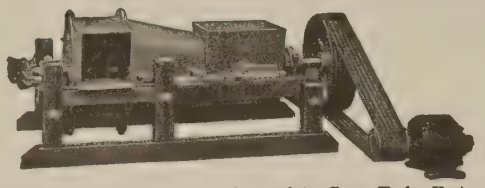
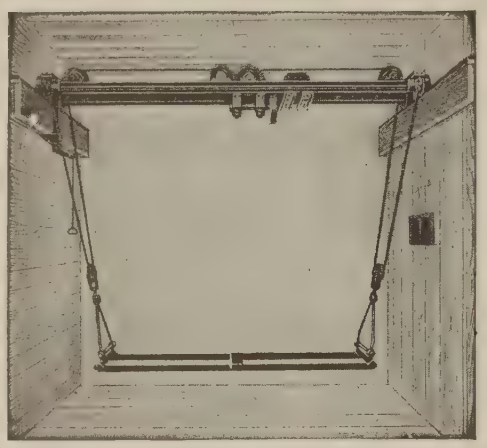
WESTERN
—GRAIN ELEVATOR EQUIPMENT—



Western Pitless Sheller with Cog Belt Drive



Overhead Electric Truck Dump

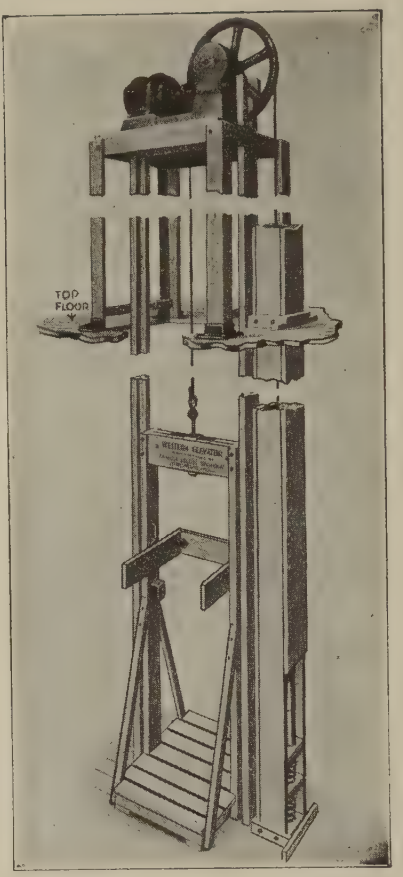
UNION IRON WORKS

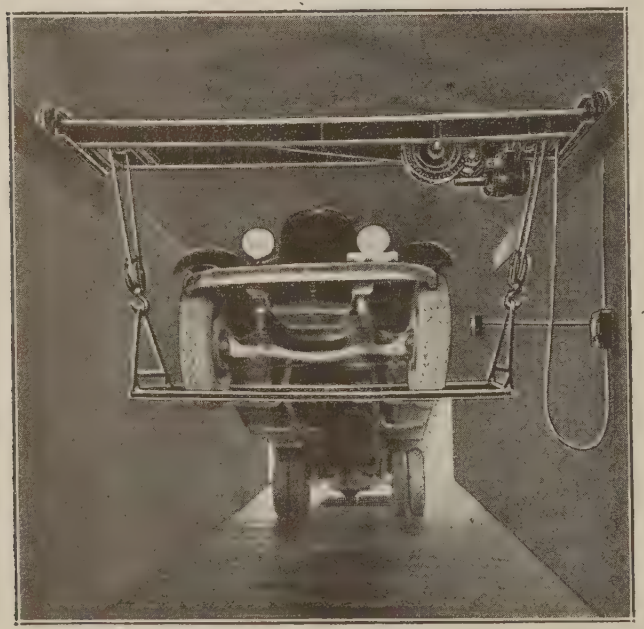
DECATUR, ILLINOIS

NEW

The ELECTRIC MANLIFT takes its place alongside our Electric Truck Hoist and Motor Driven Corn Sheller.

Write us for complete information and prices.





BENDER ELECTRIC LIFT

For every type elevator, high or low driveway. Will dump any size truck or wagon in one or more pits. All steel construction, electric welded. Self-locking worm drive with 2 H.P. geared motor. Shipped completely assembled. Simple and inexpensive installation. Write for full description.

BENDER HOIST MFG. CO.

OMAHA, NEBRASKA

Roofing & Siding

While you elevator men have the time, it would be well to go over your roofing and siding; nail down all loose ends, replace parts worn; see that your doors and windows are all tight and operating properly; make sure the rods, girts and flashings are all set up. We can supply you with all material on short notice.

For Elevator Supplies write or wire us. Prices are the lowest obtainable for high quality products, and satisfaction is assured.

WHITE STAR COMPANY

WICHITA, KANS.

SPECIAL ELEVATOR EQUIPMENT IN STOCK AT WICHITA

Shipping Notices Duplicating

A convenient form for advising receivers of the grade, kind and weight of grain shipped.

Loaded into car—initials and number, seal numbers, at..... station on.....date; billed shipper's order notify.....; draft for $.....; made through.....bank of..... to apply on sale of.....bushels made.....

Fifty white bond originals, machine perforated, easily removed without tearing, and 50 manila duplicates, bound in heavy pressboard, hinged covers, with two sheets of carbon. Size, 5½x8½ inches. Weight, 8 ounces. **Order Form 3 SN. Single copy, 75c;** three copies, **$2.00,** f. o. b. Chicago.

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St. Chicago, Ill.

GRAIN & FEED JOURNALS CONSOLIDATED

INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.

Charles S. Clark, Manager

A merger of

GRAIN DEALERS JOURNAL
Established 1898

AMERICAN ELEVATOR & GRAIN TRADE
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT-GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improvement of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, $2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, $3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., APRIL 22, 1936

A REAPPRAISAL of your elevator property by experienced appraisers would help you to prove your true loss in case of a fire.

A SOAKING rain throughout the grain belt would be as encouraging to agriculture as the adjournment of Congress would be to business.

"NO SMOKING" signs in grain elevators have never been known to offend a customer but they have materially reduced the fire hazards of many elevators.

THE WEATHERMAN seems to be thoroly peeved at the Honorable Secretary of Agriculture and the AAA and has started to see what he can accomplish in the way of reducing crops in the Southwest. Some day the dictators will stop trying to regiment the farmers' activities and take the weatherman into their confidence. Importing food supplies does not help the producers of the U. S. A.

GRAIN SHIPPERS in the corn belt should get much business in handling the 776,000,000 bus. of corn back on the farms, compared with 436,000,000 bus. a year ago.

THE BUYER who persists in raising his own bid for grain seldom has much of a balance at the bank, because he attempts to handle grain on a narrow margin.

THE PROCESSING tax mixup is making a lot of extra work for the lawyers and the courts as well as much aggravating worry and litigation for the manufacturers.

WHILE planting more kernels of corn in each hill, as recommended by some agronomists, may help to increase the average yield, it will not excuse the planting of any but the best seed obtainable.

WIRE OR METAL tags on bags of feeds are forbidden by the laws of several states and doubtless all the other states soon will have such a law in order to protect livestock from injurious foreign matter.

MOVING machinery and rubber checks seem to overtake more Iowa elevator operators than operators of any other state. Can it be that the operators of other states are more vigilant than the Hawkeyes. It surely pays to keep on guard against misfortunes known to be common to elevator operators.

TRUCKS hauling 200 to 300 bushels of corn at a load are so plentiful today that there can be no sound excuse for country elevators delaying rebuilding of driveways, or installation of large truck scales. Delay may be costly, in damage to trucks of the customers who come to the elevator, in damage to the elevator, or in loss of trade.

SELDOM is a problem confronting the grain trade so well stated as by a leading Kansas City grain merchant on page 309 of this number in his able address on "Trucking Problems in the Grain Trade," a perusal of which should help every reader to crystallize his own opinions on how to answer this burning question.

CONVEYOR BELTING will not become charged with static electricity, even in subzero weather, if the belt carriers and troughing idlers are grounded with a heavy copper wire and the belting's edge is stitched with copper wire. Grounding the motor and driven pulley will also help to prevent the accumulation of static. Jumping sparks in dust laden atmosphere have caused many mysterious explosions and will cause many more unless elevator operators take every precaution against the accumulation of static.

FEWER motors would burn out if operators would keep them clean.

FEED MIXERS have proved so profitable for the feed grinder nearly everyone has one or plans on installing one soon.

IRON CLADDING the elevator and screening all windows has taken the fire hazard out of hot locomotive sparks and saved many a plant from the flames.

THIEVES and yeggmen seem to have a weakness for breaking into the isolated grain office, so it behooves the grain dealer to take special pains to lock his office securely and safeguard it with tear gas and burglar alarms.

THE GRAIN BUYER who continues to buy grain over a small capacity wagon scale has unlimited courage and does not care if the overloaded trucks do crush it. The modern 20-ton truck scale safeguards the owner against damage suits and incorrect weights.

A STANDARD cob spout, altho inexpensive, would have prevented the communication of fire from the cob burner to the cupola of an Indiana elevator recently and thereby would have saved the elevator from the flames. The correction of known fire hazards would save many grain elevators and feed mills and reduce the cost of fire insurance.

FERTILIZERS of known quality helped many a crop on its way to early maturity last year and will do so again if every enterprising country grain buyer puts in a desirable line, then advertises and pushes its sale. The liberal use of fertilizers always has made for surer crops of good grain, and no one has yet invented a valid excuse for not repeating.

TRANSPORTATION at the expense of taxpayers has consistently marked the operations of the Inland Waterways Corporation during the years this alleged "experiment" has been conducted by the government as owner, indicating that similar transportation at the expense of the taxpayer will be extended to the rail lines if ever the government takes over the roads.

THE DEATH KNELL of the cotton pools is sounded by the Chairman of the Senate Com'ite on Appropriations in his report, No. 1819, summarized on page 314 of this number, proving that in the case of cotton the alleged co-operatives are not co-operatives, but owned by the officers and run for their benefit, the members receiving nothing. This same might be developed by a senate investigation of our biggest grain pool, which has paid nothing to members and big salaries to its officers.

SOME shippers of oats that have an odor not unnatural are unable to understand how inspectors can interpret the rules to grade the oats down to "sample" when a grading of "musty" is expected.

NO ONE has ever discovered a just excuse of taxing sales of farmers' grain when made for future delivery, yet members of Congress permit this unfair tax to be assessed against such sales thereby handicapping the marketing of farm products.

STORING grain in England against war-time emergency is the wrong policy for a nation that commands the seas, as does Britain. Storage should be near the point of origin, the nearer the better, before transportation and other charges have mounted.

MICHIGAN bean handlers now realize that the bean business in that state can only be rescued from the low estate into which it has fallen by reform right where the beans are received from growers. The jobbers of Central Michigan have agreed among themselves to buy only hand-picked beans, and thus prevent the poor quality from continuing to ruin the former good reputation of the Michigan product.

FEED GRINDERS should not overlook the fact that the operators of portable feed mills never accumulated enough profits to pay for their first outfit so quit grinding feed and sought some profitable employment. Your cost of grinding feed must include enough for depreciation and obsolescence to enable you to replace your machinery when it is worn out, otherwise you are not doing business on a safe margin.

THE SALES and dismemberment of the M. & St. L. R. R. as proposed will deprive many elevators in Iowa, South Dakota and Minnesota of railroad facilities. No doubt some of these elevators will be wrecked, some moved, while others will be kept open to serve a growing trade in seeds and other side lines. Some operators of elevators deprived of railroad facilities have found profit in trucking grain to other stations when receipts exceeded their home demand.

THE MORE general use of triplicating confirmation blanks by both buyers and sellers of grain would prevent many of the misunderstandings and differences as well as some losses. An exchange of confirmations enables each party to a contract to gain a clear understanding of the intent of the other, often before it is too late to cancel or correct without loss to each party. Confirmations cost so little and mean so much to both parties to every contract none can afford to forego the regular use of these contract clarifiers.

RAIL carriers in tying themselves up with the trucks in an attempted co-ordination of transportation are attempting in an understanding hitherto secret to restrict the highway carriers, with whom they operate jointly, from invading territory of other roads. Should such monopolistic tactics succeed in raising highway charges we can expect private concerns to place trucks of their own on the roads to carry freight at what it costs.

THE COLLECTION AGENCY entrusted with collection of bad debts must be above suspicion. The assignment of the accounts to the agency leaves the merchant at the mercy of the agency, if unscrupulous. Recently there has been reported two instances of collusion between the claim agent and office employes of the merchant, who never received the proceeds of claims collected, one case in Kansas and another on a larger scale at Indianapolis.

The Grain Dealer's Interest in Larger Crops

The careful selection, the vigilant testing, the thorough cleaning and the scientific treating of field seeds will overcome much of the handicap of a dry and backward season, but unless farmers are urged repeatedly to exercise every precaution, they will continue to follow old time haphazard methods and thereby reduce the possibility of growing a crop for the country elevator man to market.

The country buyer is just as much interested in the production of large crops of quality grain as is the farmer. Both are injured by the continued importation of large quantities of agricultural products. Grain and flaxseed from the Argentine, India, South Africa, Roumania and Poland has been imported in unprecedented volume during the last two crop years and thereby depressed the market value of domestic products, and unless United States farmers overcome the many discouraging conditions now confronting them, the farmers of other countries will continue to surmount our tariff wall and undersell United States producers in their home markets.

The first duty of the country grain merchant is to encourage and assist his farm patrons to obtain and prepare seed which gives the greatest promise of producing a desirable crop; without complete cooperation at every turn the harvest will surely prove disappointing to all concerned.

Many country dealers have been very busy of late selecting, testing and treating seed for their farmer patrons and thereby stimulating a greater interest among their friends in the planting of seed that give promise of a crop.

Do You Guarantee Bad Debts?

Requiring regular grain dealers to serve as lien collectors for landlords, money lenders and givers of credit is decidedly unreasonable, yet the laws will not be changed until the sufferers join hands and demand relief. Liens upon farm products could and should be filed with the county recorder so regular buyers would have an opportunity to learn who has a clear title or an interest in the property offered for sale in the public market. Lien holders who are not interested enough to file their liens and formally notify regular buyers are not entitled to any protection. While the grain dealer may be more reliable than the shiftless debtor no excuse is found for burdening him with the collection of bad debts.

The lien laws of many states encourage landlords to join with their tenants in trapping unwary buyer in the purchase of grain covered by a lien so they can bluff him into paying for the grain a second time. This is neither fair or equitable but the laws will not be changed until the grain dealers persist in demanding relief from the collection of bad debts for others.

Commodity Exchange Restrictions Harmful

The commodity exchange bill now the subject of hearings before the senate com'ite on agriculaure contains provisions harmful to those now benefited by the present system of trading, not the least of the beneficiaries being the farmers.

The restrictions on trading would limit the ability of bona fide hedgers to get in and out of the market. Any limitations on trading would drive speculators out of the market, so that heavy sales by millers and elevator men during the harvest movement would strike air pockets thru which the price would drop. These lowered quotations would be reflected back to the farmer selling to the miller and warehouseman. There can be no broad hedging market without short selling as a balance-wheel.

The bill would promote monopoly by big grain merchandising concerns, both pool and non-pool.

Without a stable hedging market cash handlers would be forced to buy and sell on a wider margin of profit, in self defense.

Finally, more regulation is unnecessary since the business conduct com'ites of the exchanges have begun functioning.

The bill delegates too much power to one man, the Sec'y of the U. S. Department of Agriculture; and whenever a new secretary takes office a change in the rules may be expected.

Refuse to Store Damp Grain

Accepting damp wheat or damp grain of any kind for storage is always accompanied with the prospect of dissatisfaction and disputes even tho the warehouseman accepts the grain under protest.

A wheat buyer at Newburg, Ore., recently lost a damage suit for $4,500 even tho his storage receipt specified that the wheat was damp on delivery, and both he and the farmer knew that damp wheat could not be safely stored. Of course, the case will be appealed to the State Supreme Court and probably successfully defended, but the worry and expense of fighting such unreasonable lawsuits is always irritating and never profitable. If he wins the suit he will lose a customer.

Some sharp farmers seem always looking for an opportunity to gain a small advantage so it behooves every grain buyer to exercise extreme vigilance and refuse to accept any offgrade grain that is shadowed with trouble. The hazards of the business are ample without unnecessarily courting trouble.

Selling Stored Wheat for Charges

John Kvame stored several lots of wheat in the elevator of the Farmers Co-operative Elevator Co. at Simcoe, N. D., Sept. 8 and 20, 1928, and Aug. 26, 1929. On Apr. 25, 1932, Kvame tendered the storage charges and demanded the wheat.

Aug. 17, 1932, the elevator company wrote Kvame stating that $1,456.50 in storage charges had accrued and offering to accept the storage tickets in payment, the storage exceeding the value of the grain. Kvame had not pressed his earlier demand because the elevator contained none of the kind of durum he had delivered. On receipt of this letter, Kvane came to the elevator and said he would hold the grain as the market might go up.

July 14, 1933, Kvame went to the elevator to sell the grain; but was told he did not have any grain in the elevator, as it had all been sold for storage charges.

In September, 1932, a letter was sent by registered mail to Kvame describing the storage tickets and stating the amount of the claim. A notice of sale was thereafter posted, stating, "Notice is hereby given that the Farmers Co-operative Elevator Co., of Simcoe, N. D., will sell at public auction the following described storage tickets belonging to John Kvame, to-wit:" As the tickets were in the possession of Kvame, the court held the sale void, as under the law the ticket-holder may keep the grain stored indefinitely.

Kvane brought suit for conversion July 26, 1933, and to recover the highest market price between the date of the conversion, July 14, 1933, and the date of trial. The district court of McHenry County gave judgment for Kvame; but the Supreme Court of North Dakota on Aug. 24, 1935, reversed this, granting a new trial entitling the elevator company to storage charges.—*262 N.W. Rep.* 242.

Legislation at Washington

Hearings were begun Apr. 21 on the commodity exchange bill by a sub-com'ite of the agricultural com'ite of the Senate.

Pres. Robert P. Boylan of the Chicago Board of Trade asked the com'ite to reconstruct the unworkable parts of the bill.

The Millers National Federation stated its objections to the bill.

Objectionable features of the bill include limits placed on the amount of futures held by one account, either long or short, which would interfere with normal hedging practices; registration of brokers with penalty of revocation of registration for violations of various provisions of the bill; prohibition of certain classes of trading which contribute to a liquid market, and confer on government officials power to impose orders that would be unsettling to grain trading.

On Apr. 22 there is scheduled to be heard the support for the bill drummed up by Lobbyist Thatcher, paid by the Farmers National Grain Corporation. Thatcher sent out a letter to thousands of farmers demanding that they write to Senator Robinson, who as Senate floor leader, could expedite action on the bill. The truth is that there is no real demand from the farmers for this restrictive legislation.

H. R. 12215, introduced by Hull, provides for the following amendment to the new Conservation Act: "Sec. 6. No payment or grant larger than $1,000 shall be made to any person, firm, corporation, or state or municipal institution under the provisions of this Act."

H. R. 12200, introduced by Ferguson, amends the Soil Conservation Act, authorizing the appropriation "for each of ten years beginning with the fiscal year ending June 30, 1937, the sum of $10,000,000, to be expended in carrying out the provisions of section 1 of the Soil Conservation and Domestic Allotment Act, for the purpose of acquiring pasture land. Any amount appropriated as herein authorized, and not expended during the fiscal year for which appropriated, shall remain available during subsequent fiscal years until expended for the purpose herein specified."

H. R. 12192, by Sisson, introduced Apr. 7, reads as follows: "The Revenue Act of 1934, as amended, is amended to read as follows: Exemption shall not be denied any such (farmers co-operative) ass'n because it has capital stock, if the dividend rate of such stock is fixed at not to exceed the legal rate of interest in the State of incorporation or 8 per centum per annum, whichever is greater, on the value of the consideration for which the stock was issued, and if at least 75 per centum of all such stock (other than nonvoting preferred stock, the owners of which are not entitled or permitted to participate, directly or indirectly, in the profits of the ass'n, upon dissolution or otherwise, beyond the fixed dividends) is owned by producers who market their products or purchase their supplies and equipment through the ass'n; nor shall exemption be denied any such ass'n because there is accumulated and maintained by it a reserve required by State law or a reasonable reserve for any necessary purpose."

Senate Joint Resolution 249, by Benson, proposes an amendment to the constitution, as follows: Congress shall have the power to regulate, limit, and prohibit the labor of persons under eighteen years of age; to limit the worktime and establish minimum compensation of wage earners in any or all occupations; to protect by law the right of all employes to organize and bargain collectively with their employers; to provide for the relief of the aged, invalided, sick, and unemployed in the form of periodical grants, pensions, benefits, compensations, or indemnities from the public treasury; *to establish, acquire, operate, or regulate agencies for the marketing and processing of agricultural products;* to establish acquire, and operate such natural resources, properties, and enterprises in manufacturing, mining, commerce, transportation, banking, and public utilities as are essential to the social and economic welfare of the people, such enterprises to be governed democratically for the benefit of the public by commissions consisting of representatives of workers, consumers, and technicians.

Selling Grain Covered by Thresher's Lien

A thresher's lien foreclosure suit was brought by the Agricultural Bond & Credit Corporation against the Courtenay Farmers Co-operative Ass'n and the Atlantic Elevator Co., of Courtenay, N. D., for large quantities of wheat, flaxseed and barley stored by four farmers.

On Oct. 30, 1930, the elevator companies deposited the storage receipts in the district court in which the foreclosure suit was pending. In 1932 the clerk of the court, without authority, delivered the tickets to Coffey & Strutz, attorneys for the elevator companies, and J. A. Coffey sold the grain. On Sept. 25, 1934, notice was served on the elevator companies to return the tickets.

Coffey & Strutz asked for return of the tickets on the theory that since the two elevator companies had not appealed from the order of court directing sale of the grain, the case was closed, as to them; but the Supreme Court of North Dakota on Aug. 26, 1935, held that the rights of those who did appeal, Larson Oil Co. and others, could not be ignored, and the grain was subject to order of court until all appeals had been disposed of. The oil company and others had objected to storage charges. The court held that lienholders are entitled to the value of the grain on Sept. 5, 1934, subject to legal charges, that being the date upon which special execution was served upon the defendants and their attorney, J. A. Coffey.—*262 N.W. Rep.* 453.

The administration of the United States Warehouse Act consists primarily of licensing warehousmen, storing agricultural products, and supervising their operations after they have been licensed. By the close of the fiscal year June 30, approximately 961 warehousemen had been licensed, some of whom may operate several warehouses at the same point. The Department plans to make four inspections of each warehouse annually; this now means at least 3,844 inspections each year. The inspections are complete audits of stocks in warehouses as compared with outstanding receipts, and examinations are made on each inspection to determine that all receipts that may have been issued or surrendered have been properly satisfied.

GROWL, and the way looks dreary; laugh and the path is bright; for a welcome smile brings sunshine, while a frown shuts out the light.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

Small Margins in Grain Handling

Grain & Feed Journals: The grain business has become a racket instead of a business. The trade will let no one make a dollar. Agricultural colleges advertise protein premiums and insist that the farmers should benefit from them. Local buyers try to guess the protein content of wheat and usually outguess themselves, so that when they balance their books at the close of the year, they put in the finishing touches with red ink.

Within the grain trade is strife, big handlers against little ones. The big grain dealers doing a large volume of business falsely believe they can handle a little additional volume at a small fraction of the normal handling charge, and still make some profit. This is not possible. Every bushel of grain handled should pay its proportion of the expense of maintaining facilities, and doing business. Every bushel of grain that is handled for nothing, or handled at a loss, simply subtracts the amount of the loss from the profits made on other bushels.

Recently I talked to a near-by operator of a large elevator. He admitted buying a couple of cars of corn in which he had only ½c a bushel margin, but he believed he had made the ½c as profit. I suspect that if he figured out the complete deal, including his handling costs, investment, interest, and other factors, he found that he had actually lost ½c a bu. in the transaction.—Francis S. Miller, McDonald, Kan.

The Tricky Truckers

Grain & Feed Journals: The leaven is working in all of the grain states, among all classes of business for new laws regulating the commercial and contract trucking operations. The towns and communities located along branch railroad lines are becoming alarmed over a traffic condition which is putting these branch lines out of business. Where they have been abandoned the people have suffered enormous losses in the value of their properties thru curtailed business volume and higher transportation rates.

The acute trouble now is the vast army of truckers running hither and yon without any load limits, no insurance, no security bonds, and no truck inspection. President Olson of the Minnesota Farmers Grain Dealers says: "Trucking is here to stay but should be kept in its proper limitations. We are now at the cross roads. If we are going to continue the development of trucking of unlimited heavy loads it means the commercialization of our highways, doing millions of dollars of damage to our hard surfaced roads; that the hazards due to these trucks will increase accidents and the ultimate ruination of the country elevator, lumber yards and coal dealers and the abandonment of a large mileage of railroads. If carried further it will terminate in only a peddlers market for the products of our farms because it will destroy our efficient central markets which it has taken years to build. The people are rapidly beginning to realize this menace and I believe we are going to see its correction in the near future."

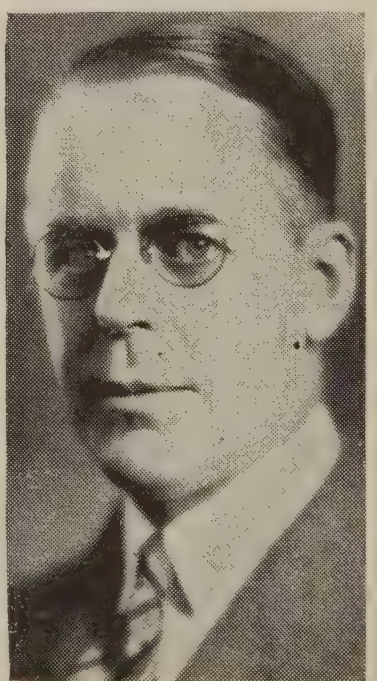
A crippled trailer standing on the highway without lights north of Council Bluffs, killed four people last week. Here they go, there they go, hither and yon, these itinerant truckers. Maybe half drunken drivers, half asleep, no attention paid to safety precautions, cheating and stealing to make expenses. No worse menaces to human life exist anywhere than these night prowling truckers. They must be abolished by rigid laws strictly enforced. Send us word of their escapades and publish them in your local papers. Pledge your candidates for the legislature to support the measures we need to clean them out.—Nebraska Grain Dealers Assn., J. N. Campbell, Secretary.

Abandonment Proportionate to Subsoil Moisture

Grain & Feed Journals: Over a period of twenty years, the percentage of normal precipitation falling thru the fall and winter months has shown a close correlation to the final abandoned here in the Southwest.

Results have averaged as follows: When precipitation was 100 per cent of normal there would follow 10 per cent abandonment; precipitation 80%, abandonment 30%; precipitation 60%, abandonment 65%; and with 50% precipitation 90% abandonment.—Dodge City Terminal Elevator Co., J. F. Moyer, mgr., Dodge City, Kan.

Making calculations for the increase in income from livestock in 1935 over 1934, and combining the results for the two year control period, we find a total gain in farm income of $2,000,777,000 of which $813,514 000 came from A.A.A. control products and $1,187,263,000 from independents. Altho the contract signers received benefit payments in these two years aggregating $1,074,000 000 their total income (including bonuses) for 1934 and 1935 was $5,373,083,000 while for the same period the independent farmers received $10,012,760,000. Thus the unregimented farmers received 85 per cent more income than the controlled farmers during the past two years.—Dr. E. V. Wilcox, sec'y Farmers Independence Council.



David D. Tenney of Minneapolis, Minn., Deceased.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same industry. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Apr. 25. Western Seedsmen's Ass'n, Fontenelle Hotel, Omaha, Neb.

May 8. Oregon Feed Dealers Ass'n at Multnomah Hotel, Portland, Ore.

May 14, 15. Illinois Grain Dealers Ass'n, Hotel Jefferson, Peoria, Ill.

May 15, 16. Panhandle Grain Dealers Ass'n, Amarillo, Tex., Herring Hotel.

May 19, 20. Texas Grain & Feed Dealers Ass'n, Fort Worth, Tex.

May 22, 23. Grain Dealers Ass'n of Oklahoma, Youngblood Hotel, Enid, Okla.

May 24. National Farmers Co-op. Elvtr. Assn', Hotel Fontenelle, Omaha, Neb.

May 26, 27. Kansas Grain Dealers Ass'n, Dodge City, Kan.

June 1, 2. Pacific States Seedsmen's Ass'n, Hotel Del Monte, Del Monte, Cal.

June 1, 5. American Ass'n of Cereal Chemists, Adolphus Hotel, Dallas, Tex.

June 8, 9. Central Retail Feed Ass'n, Schroeder Hotel, Milwaukee, Wis.

June 11, 12. American Feed Manufacturers Ass'n, Greenbrier Hotel, White Sulphur Springs, W. Va.

June 12, 13—Pacific Northwest Grain Dealers Ass'n, Lewiston, Ida.

June 12, 13, 14 and 15. Society of Grain Elevator Superintendents of North America, at Duluth June 12 and 13, and at Minneapolis evening of June 13, and June 14 and 15.

June 16-17. Northwest Retail Feed Ass'n, West Hotel, Minneapolis.

June 18. Missouri Grain Dealers - Millers Ass'n, Missouri Hotel, Jefferson City, Mo.

June 22. New York State Seed Ass'n at Syracuse, N. Y.

June 22, 23. Ohio Grain, Mill & Feed Dealers Ass'n, Cedar Point, O.

June 25, 26, 27. Southern Seedsmen's Ass'n at Dallas, Tex.

June 29. Farm Seed Group of A. S. T. A. at Dallas, Tex.

June 29, 30 and July 1. American Seed Trade Ass'n at Dallas, Tex.

Oct. 12, 13. Grain and Feed Dealers National Ass'n at Hotel Schroeder, Milwaukee, Wis.

New York, N. Y.—Imports of more than 34,000,000 lbs. of duty free foreign starchy materials, including tapioca and sago, during January established an all-time monthly high, says the Corn Industries Research Foundation.

Death of David Tenney

David Darrell Tenney, after an illness of several months, died at the Northwestern Hospital, Minneapolis, Minn., aged 58 years.

Mr. Tenney has been a resident of Minneapolis since he was brought there from Corning, Ia., at the age of three. After two years at Yale University he enlisted in the 51st Minnesota regiment for the Spanish-American war. Before the world war he had been active in the Red Cross and helped to organize the first New York Red Cross.

He maintained a large farm near his summer home at Crystal Bay, Lake Minnetonka, where he bred Guernsey cattle. In 1928 he was elected pres. of the Minneapolis Civic and Commerce Ass'n.

At the time of his death Mr. Tenney was pres. of the Tenney Co., organized by him in 1913 to do a grain commission business and which was most successful. He is survived by wife, a son, and a daughter.

Trucking Problems in the Grain Trade

By Frank A. Theis, Kansas City, Mo., before Trans-Missouri-Kansas Shippers Advisory Board

I do not recall in all my experience ever having to consider such a serious question, affecting, if you please, the very vitals of our entire system of doing grain business, as this truck problem.

We have known it has existed for a long time, of course, but only this last fall, when we were confronted with the, you might say, complete stagnation of corn business in this market, did we come to the realization that something was very radically affecting our business and we did not know exactly what it was.

A grain man is more or less complacent. He is accused many times of being satisfied unto himself and as long as business is good he has no complaint. But, this time it was affecting his pocketbook to the point where he was aroused. And it befell a little group out in southeastern Nebraska to bring this thing forcefully before us.

A little group of country elevator people called a meeting for the reason that some 75 of them were confronted with the fact that they were doing absolutely no business. The result of that meeting was the appointment of a committee to confer with the various grain interests, country elevators, terminal operators, etc. The meeting was held in St. Joseph on Jan. 8. I wish I had the time to tell you of the story that these people from the country presented at that meeting. The complete loss of business was staggering. The outcome of that meeting was that they appointed an executive committee to confer and work with all the grain interests of the nine Southwestern states. Unfortunately, they appointed me as chairman of that executive committee, but nevertheless we immediately became active and appointed 14 sub-committees to study the subjects that had been brought forward in that St. Joseph meeting.

Itinerant Peddler Condemned—At the outset we must realize that there is a place in the sun for certain truckers and all the regulation and all the federal laws or state laws we might desire to pass should not eliminate some contract and common carrier trucks. There is some trucking going to be operated and continue to operate on a highly economic basis. That is not the type of trucker we are after at all. It is the trucker that is partly a grain man, an itinerant peddler.

Kansas has certain regulations and definite requirements, which I think are very good, as to liability insurance, etc., while many states have not developed. Missouri happens to be one of those states where trucks seem to be operating hither and thither with little or no regulation.

Big Percentage by Truck from Certain Territory.—After we got into this matter further, we found by questionnaire sent to originating territory of corn in Iowa and South Dakota, that on this year's crop beginning in December, 75% of the corn that had moved from the originating area had moved by truck. We found in the territory where Kansas City, St. Joseph, Omaha, Sioux City grain firms had been doing business for years, that is the territory down in south Missouri and going into Kansas, that between 75 and 90% of the corn that had moved into that territory for feeding purposes had moved by truck. No wonder we were losing business.

We found on Highway 71, in checking with a country grain man who had at one time enjoyed a good business at his country elevator, that on one day 160 trucks of corn passed his elevator going south. Most of them, incidentally, were going down Highway 71 on the west side of Missouri to avoid the port of entry law in Kansas. We found cases where corn had been going into stations by rail for many many years, on an average 75 to 80 cars a month for feeding purposes, that only five or six cars had come in by rail and the balance by truck. We found one oil station in Missouri where the operator in order to get the gasoline business from these trucks had established a grain business and when the truckers came with a load of corn he had orders waiting for them. His grain commission was the sale of gasoline in order to keep some business at that little station.

Just recently the Kansas City market grain firms have had a renewal of a little corn business into south Missouri and Kansas. We had a small stock in Kansas City elevators that has been baled out. There has also been some little movement by rail from Iowa and South Dakota. I speak now for my own firm—we have had three of our former customers, who had not purchased a car of corn on this crop until the last few days tell us: "We are buying a car of corn from you today because there are no trucks in town and because we understand the highway commission in Iowa has declared an embargo on truck operations on the county highways on account of road conditions and they are limiting trucks to a gross weight of 6,000 lbs. However, your car must be out today because we think tomorrow the trucks will be in here again." I could go on at great length and show you men just what has happened to one phase of the merchandising business of this territory. But I want to say to you frankly I am worried about it, not so much because of this little operation that is going on in corn, but because I am convinced it is merely a forerunner of what we are going to have to expect in a much broader and general operation unless proper regulation is brought about to place these truckers on a competitive basis with other lines of business.

Big Truck Receipts at a Missouri River Market.—Already at one of our Missouri River markets, two large operators have taken in practically a million bus. each during 1935 from the trucks. We have only one operator in Kansas City who is doing a big truck business, but I will say to you men frankly, and I am not trying to threaten anyone at all, that unless the situation is corrected, you are going to find many grain operators going into the truck business in terminal markets as a matter of self-preservation and in order to continue in business at all.

Texas Dealers Trucking.—A little less than a year ago I talked before the Texas Grain Dealers' Ass'n in Galveston. One of the subjects on their program was the question of truck regulation in the state of Texas. The gentleman who was allotted that subject discussed it very intelligently. The chair called for a discussion from the floor and there was a complete riot. The result was that the matter was tabled. I was curious to know why, and I found later that 50% of the grain dealers in Texas had gone into the trucking business.

You men know as well as I do that this one industry, the grain industry, has been built from its very inception and followed the course of rail development. From the country points to the terminal markets, to the mill distributor, to the feed manufacturer, everything has been developed on the basis of rail operation. There is no intention, willfully, to avoid that perfectly natural development, but if forced, as I say, by the conditions now existent, I am very much afraid that you are going to find lots of people in the grain and milling business going into the trucking business on a far more extensive scale.

Federal Motor Carrier Act Not Helpful.—Well now you say how is the grain trade going to handle this problem? Frankly, the more we get into it the less we know. We do believe, however, that thru the Ass'n of Southwest Country Elevators, which comprises some 8,000 units, that we can begin to point out to the small towns the terrific damage being done to their communities by the operation of these trucks. We have made, among other subjects, a study of the Federal Motor Carrier Act. I will say, in my opinion that act even fully enforced is not going to correct the situation that is bothering the grain trade. It is the trucker-peddler who operates with no liability, no responsibility, who is the menace to the country elevator at this time.

We have a tax and license fee committee, an occupational license committee, a committee on frauds. This last mentioned committee report simply staggered me showing some of the slick methods that these "fly-by-night" truckers have in hoodwinking farmers that they buy from and sell to.

The things they are doing in the way of establishing weights, erroneous misrepresentations of grades of grain, etc., are quite amazing. I could talk three or four hours on the subject of frauds and it would open your eyes to what is going on in our particular industry.

The safety measures committee, which, of course will work with the highway commissions in various states. Incidentally, we had a captain of highway police in Missouri talk to our meeting in Kansas City. He had more common sense than any man I have listened to for a long time. One thing I learned from this man was his experience in lobbying for his commission. I was interested in knowing what the farmer reaction would be to any sort of regulation to prevent this wild-cat trucking. I had been told previously that the farmer was delighted with this truck development because it gave him a market he had never had before. Much to my surprise he said the farmers were up in arms and willing to try to do anything they could to rule these fellows off the highway.

Legislation Thru Joint Effort.—It is going to require, we believe, proper education in all local communities as to just what this truck problem really is, and we have a committee for that purpose to co-operate with allied industries. The grain group expect to take the leadership in endeavoring to get proper legislation in these nine states in our territory. In each state the situation may be entirely different, so that the problem in that state is going to have to be weighed and discussed and handled by a committee of that state. It is our intention to work with the lumber people, the coal people, the live stock people, the produce people, everybody affected by this problem. It is not our purpose to bring any railroad lobby into the situation, we are not inspired by the railroads—we are out trying to fight for our own existence and the country markets. The country dealer and the farmer is particularly interested, for we believe that he is being convinced the trucker-dealer can completely demoralize our whole system of doing business.

Would Remove Trading from Exchange Floor to Trucking Lot.—You men who have been on our grain exchange trading floor and have seen the samples of grain displayed for sale through what is perhaps the most highly competitive system ever devised, will be amazed to know that I have some information from one of the Missouri River markets that they are seriously considering renting a vacant lot and having trucks come in and buy their grain direct from the truck. If it comes to that, Heaven help the poor grain man and all the railroads operating in this territory.

Closing out its "moral" obligations under the invalid crop control law the A.A.A. announced Apr. 10 that it would pay farmers 21½ cents per bushel for having contracted to adjust their wheat seedings prior to the decision of the Supreme Court Jan. 9, 1936.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

Rutland, S. D., Apr. 9.—No seeding done here yet, as we still have snowbanks and cold weather.—G. J. Graff.

New Hartford, Ia., Apr. 16.—Farmers expect to plant a normal acreage of corn and soybeans.—H. B. Good, New Hartford Elevator Co.

Ada, Okla., Apr. 11.—Oats are not doing any good, too dry, looks like 50% of a crop. Wheat, fair condition, 75%. Corn, too dry, condition 50%.—Ada Milling Co.

Byers, Tex., Apr. 16.—Wheat is in bad shape. If it doesn't rain soon, it won't make a bushel to an acre. It will not last longer than this week without rain.—W. H. Wright.

Masonville, Ia., Apr. 15.—Fully 50% of the farmers will have to buy seed corn this season. There may be some substitution of soybeans for corn.—Masonville Elevator, Thos. C. Powell.

Apache, Okla., Apr. 15.—Wheat acreage 110%, condition 25%; corn acreage 100%, condition 40%; oats acreage 120%, condition 25%; barley acreage 100%, condition 25%.—Apache Milling Co.

Bangs, Tex., Apr. 15.—Wheat 10% less acreage, 50% condition, 30% plowed up or will be, and sudan, hegari and maize sown in its place.—Ray Bain with M. F. Walker, elevator owner.

Popejoy, Ia., Apr. 17.—A sharp increase in the acreage sown to grasses and legumes is following the soil conservation plan of the Federal Government.—A. E. White, White & Ackerman.

Ames, Okla., Apr. 15.—Wheat is suffering from dry weather. A large percentage of the wheat will be plowed up and put to corn if it don't rain soon.—Farmers Elevator Co., A. W. Fish, mgr.

Pierre, S. D., Apr. 6.—It is impossible to make an intelligent report of grain conditions in this locality at this time. Some spring wheat has been sown. It is still cold and stormy.—F. M. Rood.

Clarion, Ia., Apr. 18.—We must anticipate a poor stand of corn this year. Germination of seed corn that many farmers will plant forecasts a poor stand before the corn is planted. —William Burt. Burt Grain Co.

Hoyt, Kans., Apr. 15.—Wheat 15% increase; 10% will be plowed up, no doubt put into corn. Oats 25% increase, stand very poor unless it rains soon. Corn acreage depends on outcome of oats and wheat, too early to predict.—F. W. Hall & Son.

College Park, Md., Apr. 13.—A Maryland winter wheat crop of 7,276,000 bus. is indicated by Apr. 1 condition. This compares with last year's crop of 8,323,000 bus. and the five-year (1928-1932) average of 8,648,000 bus.—Maryland Crop Reporting Service.

Beaver, Okla., Apr. 18.—Owing to continued wind and drouth it looks as tho there would not be enough wheat raised here in the Panhandle to seed itself. As to other crops, it is so dry very little is being done.—Beaver Co-operative Grain Growers, H. E. Niles, sec'y.

Obion, Tenn., Apr. 16.—No wheat acreage abandoned. About 85% of farmers will cooperate with new program, with very little increase in any crops. Land is working fine, and corn will be about two weeks earlier, with continued good weather.—Fox Grain Co.

Walters, Okla., Apr. 18.—Our crop is a total failure. Some farmers have never taken their stock off of the wheat pasture, and many others are turning their stock back on. With immediate good rains we could not even make good hay out of oats and wheat.—D. F. Wegner.

Newbern, Tenn., April 14.—Acreage of wheat very small, condition good, about the same as last year, none plowed up. Oats acreage about an average, condition good, some increase in acreage, none plowed up. Think the corn acreage will be increased probably 10%.—Johnson Grain Co., A. H. Johnson.

Bushland, Tex., Apr. 18.—Acreage of wheat, 15,000; 40% plowed up. Oats acreage, 7,000. Barley, 6,000. If it rains in the next few days most of it will be all right, but if it stays dry very much longer there will not be much grain raised here. Most of the plowed up wheat ground will be planted to grain sorghums.—Hill Elvtr. Co.

Kirwin, Kans., Apr. 16.—Very dry here. Wheat going back. We need rain. Wheat acreage about same as last year, probably 10% abandoned now, more will follow unless rain comes soon. Windy and dusty, which is hard on wheat. Milo and kafir will take the place of wheat blown out.—Farmers Elevator Co., H. A. Smith.

Evansville, Ind., Apr. 15.—Prof. J. J. Davis, head of the department of entomology, pointed out that according to present indications the Hessian fly wintered over in appreciable numbers, and when the flies start to emerge within the next week to ten days they are apt to be more destructive to wheat than under normal spring conditions, due to the fact that much of this year's wheat crop is somewhat backward. —W. B. C.

Archer City, Tex., Apr. 16.—Wheat acreage 100%, condition 35%. Oats acreage 100%, condition 40%. Persistant drouth has damaged local crops to a very large extent and if rain does not come soon most of it will be plowed up and planted to sorghum for rough feed. Stockmen are hauling water for their cattle and dust storms are the order of the day. The above are our principal crops, together with cotton and cattle.—Charles H. Thuman.

Helena, Mont., Apr. 14.—The April 1 condition of Montana's winter wheat crop was 64% of normal or 15 points below both the 10-year (1923-32) average for that date and the condition of the crop on Apr. 1 a year ago. However, a much larger seeded acreage this year on basis of present condition of the crop indicates a production of 8,832,000 bu. compared with the 1928-32 average harvest of 8,800,000 bu. In 1935 the crop made 10,469,000 bu.—U. S. Dept. of Ag.

La Harpe, Kans., Apr. 16.—Wheat acreage 10% of 1935 crop, 2% now plowed up, balance drying up. Very dry, 90% will be plowed up if it does not rain soon. Oats 100% of 1935 crop, 20% killed by freeze; most acreage will be left but very thin stand and it must have rain soon. Flax 110% of 1935 acreage, all early flax killed by freeze, 85% resown, all laying on ground, too dry to sprout. Corn 75% will be planted of 1935 crop if it rains soon; very little planted yet.—Wilson & Son.

Bicknell, Ind., Apr. 10.—This cold, rainy weather here is getting serious. We had a few days of good weather in which the farmers got some oats sown, also some clover, but we have had so many hard freezes since it is questionable about it being alive. It will make our farmers late again, and God forbid that we have another crop of roasting ears such as we had last year. Wheat is looking pretty fair, the early sown was hurt by the fly last fall, and seed corn is a real problem here. —O. L. Barr.

Junction City, Kan., Apr. 15.—The acreage of wheat seeded in this (Geary) county last fall was about 5% more than the previous year, but now with continued dry weather with winds, it looks like there will be that much abandoned, and even more unless we get moisture soon. The top soil is very loose and ashy and the shifting of soil is very noticeable in many fields. We are told that many fields that are blowing this spring were never known to blow before. There appears to be some subsoil moisture down about 2 to 3 inches. Oats getting very poor start and needs moisture very badly. Pastures are not starting.—Hogan Milling Co.

Ottawa, Ont.—Unmerchantable wheat in the prairie provinces (unfit for feed or sale) is placed at 9,417,000 bus. and the amount of wheat to be fed on farms in the crop year at 20,200,000 bus. This will presumably be of very low grade. Inspection records from Aug. 1, 1935, to March 31, 1936, disclose that 11,600,000 bus. of "feed" wheat have been delivered, together with 7,700,000 of No. 6 and 2,900,000 of No. 6 special. These grades may all be rated as unfit for milling and additional quantities of unmillable wheat would certainly appear in other higher grades. The above estimates of wheat unmerchantable and fed to live stock and poultry and the actual inspections of the specified grades total 51,817,000 bus.—Dominion Bureau of Statistics.

Fleming, Colo., Apr. 16.—Winter wheat 50% abandoned, balance about 50% of normal. Spring wheat being put in and quite a little barley. Top moisture is fair, but we have no sub-soil moisture at all. Should have good rain soon. We will have a big acreage for corn, so send us the rain.—Farmers Co-Op. Elevator Co.

Chicago, Ill., Apr. 16.—This situation threatens just now to be far worse than what many may suppose, for not only does it concern the 6,000,000 acres mentioned in my reports, but also wide sections throughout the central portions of Kansas and Oklahoma and portion lying east of the panhandle in Texas, where submoisture is also dangerously insufficient. To make the situation worse than was feared last month, is the fact that not only did hot weather set in before the coming of rains, but it set in fully three weeks earlier than has been usual in those latitudes.—H. C. Donovan, statistician Thomson & McKinnon.

Columbus, O., Apr. 11.—The Apr. 1 crop report for Ohio indicates a considerable reduction in winter wheat compared with the crop of 1935. Weather conditions have greatly delayed farm work this spring. Farmers have been unable to do much plowing, very few oats have been sown and far more than the usual amount of corn remained to be husked on Apr. 1. Conditions on Apr. 1 indicated a winter wheat crop in Ohio of 31,248,000 bus. compared with 42,343,000 bus. in 1935 and 30,251,000 bus. the five year average, 1928-1932. Prospects vary widely in different parts of the state. It is still too early to state definitely how much of last fall's planting will be abandoned but present prospects point toward more than the usual amount of such loss.—U. S. Dept. of Ag.

Minneapolis, Minn., Apr. 18.—Soil conditions in the Northwest are generally good, with the recent warm weather causing the snow to disappear and the ground to dry up and thaw out so that the farmers now can get into the fields and plant their crops. The precipitation in the Northwest during the first fifteen days of April this year was very light, but the melting snow has furnished top soil moisture so that generally soil conditions in the Northwest are fair to good but, of course, subsoil moisture is still lacking everywhere. Seeding, generally, is about a week to ten days later than usual, which fact together with the bonus of 20c per bu. of flax payable under the soil conservation program should cause a moderate increase in flaxseed acreage this year.—Archer-Daniels-Midland Co.

Springfield, Ill., Apr. 15.—Freezing weather occurred over practically all of Illinois at the beginning of the week, temperatures in the lower twenties being recorded nearly to the southern boundary; temperature became seasonable the latter part of the week. Vegetation badly needs warmth. Soil generally is moist to wet. Farm work made very slow progress, being retarded by cold and in a number of areas by wetness. Some plowing and sowing and resowing of oats was accomplished, and some other spring preparatory work. Oats have now mostly been sown in the south, but in the north a large part of the crop is yet to be sown; even in the south much of the oat crop is not up yet. Winter wheat made slow progress, its condition averaging fair; the bulk of the crop is from two to four inches high. Rye is generally fair to good, while meadows and pastures continue to be backward. Scarcity of stock feed continues to prevail in many southern localities. — E. W. Holcomb, U. S. Dept. of Ag.

Winchester, Ind., Apr. 16.—I spent three days this week driving through central and northern Indiana and as far south as Greensburg. Drove today thru Randolph, Wayne, Fayette, Rush and down into Decatur County. All good wheat counties. In this particular part of the state we didn't see a bad piece of wheat today. Looked like there would be at least 90% to 95% of an average crop. Not of last year, because last year in this part of the country wheat was unusually good. Spent Tuesday and Wednesday in western and northern Indiana. Drove some 500 miles calling on elevators and visiting our own elevators. That part of the state will surely have 85% of an average crop. An occasional field has been disked up and put in oats. It occurs to me that all the wheat needs is some warm days and moisture to come along pretty well. Saw few fields of oats up. Elevator men are of the opinion there will be about as many oats sown as last year. Seed they used last year was bad and this year it is worse. Very light and chaffy oats. —Goodrich Bros. Co., P. E. Goodrich, pres.

Oklahoma City, Okla., Apr. 10.—The Apr. 1 condition of Oklahoma winter wheat was 62% of normal, compared with 64% a year ago and 80% the 1923-32 average. Based on the Apr. 1 condition, the indicated production is 35,050,000 bus. compared with 33,080,000 bus. in 1935; 37.348.000 bus. in 1934, and 55,145,000 bus. the 1928-32 average. The average rainfall for all sections of Oklahoma for January, February and March was 1.30 inches, or 3.64 inches below normal, the driest first quarter in 45 years. The western third of the state averaged only .69 inches. Wind storms have blown out many acres of wheat in the Panhandle.—U. S. Dept. of Ag.

Jefferson City, Mo., Apr. 10.—Weather and insect damage have combined to reduce Missouri's wheat acreage and expected production below that of last year has led to the most serious abandonment of seeded wheat in eight years. The 1936 harvest will be on 1,833.000 acres, compared with 1,900,000 last year, with the crop expected to total 23.552.000 bus. against 24,130.000 in 1935. Seriously damagd by winter kill, around 10.5% of the acreage will be abandoned, compared with 3.5% last year. Insect damage from hessian fly and prevalence of chinch bugs also has been a factor. Rye condition is 77% of normal on 71,000 acres, against 229,000 last year. Pasture conditions at 71%, compared with 73% last year, but farmers generally have sufficient hay and other forage to carry livestock.—E. A. Logan, stat. div. of crop and livestock estimates.

McDonald, Kan., Apr. 10.—Crop conditions in this immediate vicinity are good, except that we are short of subsoil moisture. Precipitation in the last four months has been below normal. However, the growth of wheat is good, and the stand has withstood the terribly cold weather without winter kill. But from 50 miles south of here in a southerly direction, crop conditions grow progressively worse well down into Texas. Springfield, Colo., didn't get enough vegetation last season to cover the open ground, and its dust storms have been continuous. Garden City is in the heart of the poorest territory. Spots south and east of Atwood, Kan., have suffered bad local dust storms. Here and from Atwood west to beyond Wray, Colo., we need only a seasonal spring, a little rain in May and the first half of June, to make another good wheat crop.—Francis S. Miller.

Decatur, Ill., Apr. 18.—Condition of winter wheat is 69% of normal, or seven points below the ten-year average. Heavy abandonment in several counties in the southern half of the state. Condition in the northern half of the state is fair to good, and abandonment light. Heavy Hessian fly infestation last fall, extremely cold winter, and smothering in low spots due to ice covering and standing water, has made a very spotted condition in the southern half of the state. Wheat growth in the upper section of the state has been retarded by dry, cold weather, however wheat has a good root growth and would respond readily to a little surface moisture and warm weather. Farmers have been busy all week breaking sod and getting their ground ready to plant corn. Oats are starting to come up. some reseeding reported in a few localities. All vegetation needs a good rain and warm weather.—Baldwin Elevator Co.

Springfield, Ill., Apr. 14. — The condition of Illinois winter wheat on Apr. 2 was 69% of normal or 7 points below the 10-year average due to adverse conditions and also heavy abandonment in several counties. State winter wheat prospect is placed at 28,420,000 bus., which compares with 26,506,000 bus. harvested in 1935 and the five-year (1928-1932) average of 30,079,000 bus. There were 1,960,000 acres of winter wheat planted in Illinois last fall. Heavy Hessian fly infestation last fall, extremely cold winter weather, and smothering in low spots due to ice covering and standing water has resulted in a very spotted winter wheat condition in the southern half of the state. Wheat growth in the upper section of the state has been retarded by dry weather and occasional cold snaps during March.—U. S. Dept. of Ag. and Ill. Dept. of Ag.

Kansas City, Mo., Apr. 15.—During the last 30 days, cool to cold weather and a little, though by far insufficient amount of moisture, has kept the wheat in a dormant condition and maintained the prospects of a fair crop for Kansas. However, the growing plant has used considerable of the sub-surface moisture in maintaining its life and considerable high wind has also used up a part of the inadequate reserve moisture. The sudden change from cool weather to unusually high temperatures, during the past week, has brought out the dire need of immediate moisture over almost the entire state of Kansas, and has crystallized our opinion, that even an average crop in Kansas is most unlikely. Press reports indicate that the three month period of January, February and March were the driest in 55 years and figures disclose a big deficiency from normal in all of the western two-thirds of Kansas since July, 1935.—The Robinson Elevator Co., H. L. Robinson.

Topeka, Kan. Apr. 10.—A winter wheat crop of 129,748,000 bus. is indicated by the Apr. 1 condition of 66% of normal, which condition compares favorably with 47% a year earlier and 37% in Apr. 1933, the two record low figures, but is below the 1923-32 ten-year average of 76.9%. 1936 production based on Apr. 1 condition is forecast at 129,748,000 bus. compared with the very short crop of 59,887,000 bus. produced last year, 79,663,000 bus. in 1934, and 171,524,000 bus. the 1928-32 five-year average. While it is too early to definitely determine the loss of seeded acreage from continued dry weather, winter killing and soil blowing, present indications are that about 22% of the seeded acreage will be abandoned. Winter wheat prospects are fair to good over the eastern two-thirds of Kansas. Top growth is generally small but stands are uniform and plants are well rooted and a good color. This lack of abundant plant growth has been beneficial in conserving the rather limited supply of soil moisture. U. S. Dept. of Ag. and Kansas State Board of Ag.

Dodge City, Kan., Apr. 15.—On April 1, we did not expect the winter wheat crop to greatly exceed 500.000.000 bus. Since that time there has been further deterioration. There are 27.-000,000 acres of the crop that have had less than one inch of moisture since Jan. 1, and each day without generous rainfall is further reducing the prospects in that area. We have made a very close survey on the six Southwest States and at this time are using 199,000,-000 bus. as a fair estimate while the Government's estimate for the other states is 265,000,-000 bus., or slightly under the 5-year average of 274,000,000 bus. Farmers in this part of the state have not been able to plant their usual acreage of oats and barley, due to the dry condition of the soil, but rain within the next few weeks would probably result in the planting of a large acreage of sorghum grains on the abandoned wheat acreage.—Dodge City Terminal Elevator Co.

Reduction in Wheat Prospect

Chicago, Ill., Aug. 21.—A winter wheat crop of 470 to 480 million bushels is suggested by reports from correspondents in the main winter wheat states, made between April 15 and 18. In the last week of March their reports suggested a crop of 545,000,000 bushels.

Estimates of abandonment have increased from 14 per cent to 20 per cent and the condition declined 8.0 points. Prospects were declining at the time reports were made, and were expected to continue until relief is received. Practically no rain has fallen in the dry era of the southwest in the past three weeks. In the soft winter wheat area much lower estimates are received from northern Ohio and northeastern Indiana.

Prospects in important wheat states now and at the end of March are: Ohio, 32, 36; Indiana, 25, 31; Illinois, 27, 31; Nebraska, 35, 38; Kansas, 113, 132; Oklahoma, 29, 41, and Texas, 18,000.000 bus. now, against 37,000,000 bus. at the end of March.—Nat C. Murray, statistician Clement, Curtis & Co.

Government Report on Wheat and Rye

Washington, D. C., Apr. 10.—A winter wheat crop of 493,166,000 bus. in 1936 is indicated by Apr. 1 condition. Production of winter wheat in 1935 was 433,447,000 bus. and the 5-year average (1928-32) was 618,186,000 bus.

Condition of winter wheat on Apr. 1, 1936, was 68.5% of normal compared with 69.8% on Apr. 1, 1935, and the 10-year average (1923-32) Apr. 1 condition of 78.9%.

Conditions on Apr. 1 indicated that about 21% of the acreage seeded last fall will be abandoned. The 10-year average (1923-32) percentage abandoned was 12.6%.

In general, abandonment is expected to be above average in the western half of the country and below average in the eastern half. Very heavy abandonment is again in prospect in the Southwestern area including the Oklahoma and Texas Panhandles and adjacent territory. The present figures make no allowance for possible diversion of winter wheat acreage to other uses because of the Soil Conservation program of the A.A.A.

Condition of rye on Apr. 1, was reported as 72.4% of normal, compared with 76.4 a year ago, 63.8 two years ago, and the 10-year average (1923-32) Apr. 1 condition of 82.3%. Condition is much below average in the Western Great Plains, which includes the important rye-producing states of North Dakota, South Dakota, and Nebraska. In this area the crop was seeded under very unfavorable conditions. In most other areas, condition is slightly below average. —U. S. Dept. of Agriculture.

Prices for all wheat futures have advanced sharply. For a time the new crop months moved up faster than the May, the near month being handicapped by a considerable volume of liquidation, which caused a narrowing of the May-July spread. For the last day or so, however, the May has been firmer, as mills have been active buyers of cash wheat, and also have removed hedges in a big way against flour sales. The change in the crop outlook has changed the attitude of flour buyers who had previously been banking heavily on what they considered brilliant crop prospects. Cash premiums for red winter wheat showed a hardening recently and cash sales from Chicago the past two days have been about 300,000 bu., significant in view of the small contract stocks there.—Fred A. Record.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye and barley for May delivery at the following markets for the past two weeks have been as follows:

	Option High	Option Low	Apr. 8	Apr. 9	Apr. 11	Apr. 13	Apr. 14	Apr. 15	Apr. 16	Apr. 17	Apr. 18	Apr. 20	Apr. 21
Wheat													
Chicago	107	88½	95	94½	96¼	95¾	96¾	98	97⅞	99⅞	101⅜	99⅜	99⅞
Winnipeg	102¼	78½	80½	80¼	81⅛	81⅛	81⅛	81⅞	81½	82¾	83⅝	82⅛	82¼
Liverpool*	96⅜	80½	91	....	....	....	90¼	90⅛	90⅝	91¾	91⅜	....	....
Kansas City	108½	88½	93¾	93⅜	94⅞	94⅞	95¾	97	97¼	98¾	100¼	98½	98⅜
Minneapolis	125½	97⅝	99½	98¼	99⅜	98⅝	99⅜	101¾	102⅝	105½	107⅝	104⅜	103⅝
Duluth, durum	105⅛	88½	91¾	90⅞	92	91¼	92	93⅞	95	98	99¼	94½	94½
Milwaukee	106¾	89½	95⅛	94⅝	96⅜	95¾	96¾	98⅛	97⅞	99¾	101½	99½	....
Corn													
Chicago	67⅝	56	60⅜	60⅜	60⅝	60⅛	60⅝	60⅞	61	62⅛	63½	62¾	63⅛
Kansas City	64¼	56⅛	60⅛	60¼	60¾	60¾	61½	62⅜	61⅝	63	64⅛	63⅛	62⅞
Milwaukee	66⅛	56⅛	60¼	60¼	60⅝	60¼	60¾	61¼	61⅛	62	63½	62¾	....
Oats													
Chicago	37½	24¾	25⅞	25⅝	25⅞	25¾	26⅛	27	26⅜	27	27⅜	26⅞	26¾
Winnipeg	35⅜	29⅜	31½	31¼	31⅝	31⅝	31¾	31¾	31⅜	31⅞	31¾	31⅝	31½
Minneapolis	29½	23	23⅞	23½	23⅞	23¾	24⅛	24⅞	24½	24⅞	25⅛	26¾	26½
Milwaukee	37¼	24⅞	25¾	25½	25⅞	25¾	26	26⅞	26½	27	27½	26¾	....
Rye													
Chicago	59	45	53	52⅜	52¾	51¼	52¾	53¾	53⅛	53⅝	54⅜	53¼	53¼
Minneapolis	59	42⅝	47¼	46⅝	47⅜	46¾	47	48½	47⅛	48½	48⅝	47⅝	47⅜
Winnipeg	53	40⅞	42⅞	42⅜	43⅛	42⅞	42⅞	43⅛	42⅜	43⅜	43½	42½	42⅜
Duluth	58½	46⅜	47¾	48	48	48	48	49	49	49	49	49	49
Barley													
Minneapolis	40⅜	33⅜	34¾	34⅜	34⅞	34⅝	34⅞	35⅜	35	35¾	35⅞	35½	35⅜
Winnipeg	42½	34⅝	39	38⅞	39	38¾	38⅞	38⅞	38⅜	38⅝	38¾	38½	38½

*At daily current rate of exchange.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Fleming, Colo., Apr. 16.—Very little grain left on the farms.—Farmers Co-op. Elevator Co.

Newbern, Tenn., Apr. 14.—No surplus above farmers' use held in this territory.—Johnson Grain Co., A. H. Johnson.

Ames, Okla., Apr. 15.—About 5% of the wheat is still in the farmers' hands.—Farmers Elvtr. Co., A. W. Fish, mgr.

Archer City, Tex., Apr. 16.—No wheat in farmers' hands, but there is considerable oats still unsold.—Charles H. Thuman.

Rutland, S. D., Apr. 9.—Grain in farmers' hands: Wheat, none; oats, 20%, corn, 20%; barley, 15%; flax none.—G. J. Graff.

Bangs, Tex., Apr. 15.—No wheat in farmers' hands; 20% of last year's crop in farmers' hands.—Ray Bain, with M. F. Walker, elevator owner.

Kirwin, Kan., Apr. 16.—We have been buying corn for two years, and there is very little wheat in farmers' hands now.—Farmers Elevator Co., H. A. Smith.

Montreal, Que., Apr. 14.—Navigation was officially declared open here yesterday when the first ocean vessel docked with a cargo of flax. It was the earliest arrival since 1902.

San Francisco, Cal.—March receipts of grain were: Wheat 7,100 tons, barley 15,218, oats 1,105, corn 160, beans 28,000 sacks, compared with wheat 6,980 tons, barley 7,648, oats 760, corn 200, beans 24,400 sacks in March, 1935.—San Francisco Grain Trade Ass'n, James J. Sullivan, chief inspector.

New York, N. Y.—March receipts of grain were: Wheat 982,900 bus., corn 13,500, oats 39,600, rye 1,700, barley 3,400, against wheat 1,135,600 bus., corn 281,000, oats 175,200, rye 223,700, barley 1,700, in March, 1935. Shipments during the same period were: Wheat 1,709,000 bus., oats 23,000, against wheat 1,262,000 bus. in March, 1935.—Dept. of Info. & Stats., Produce Exchange.

Cincinnati, O.—March receipts of grain were: Wheat 196,800 bus., shelled corn 354,000, oats 194,000, rye 33,600, barley 8,000, against wheat 110,400 bus., shelled corn 112,500, oats 104,000, rye 12,600, barley 1,600, in March, 1935. Shipments during the same period were: Wheat 230,400 bus., shelled corn 237,000, oats 84,000, rye 15,400, compared with wheat 307,200 bus., shelled corn 60,000, oats 80,000, rye 4,200, in March, 1935.—Board of Trade, John O'Hara, in charge inspec. and weigh.

Vancouver, B. C.—Total receipts and shipments of Canadian grain at Vancouver-New Westminster elevators for March, 1935, and March, 1936, respectively, were: Receipts, wheat 3,394,394 bus. and 6,892,206 bus., oats 389,620 and 344,729, barley 72,076 and 9,175, flaxseed 629 (1935), rye 1,077 and 1,081. Shipments, wheat 4,631,076 and 5,196,957 bus., oats 350,065 and 84,455, barley 36,979 and 5,522, flaxseed 36 (1935), rye 1,072 (1936).—E. A. Ursell, statistician Board of Grain Commissioners.

St. Louis, Mo.—March receipts of grain were: Wheat 787,500 bus., corn 2,473,500, oats 1,370,500, rye 71,800, barley 344,100, soybeans 45,400, against wheat 971,063 bus., corn 1,309,100, oats 454,000, rye 7,800, barley 89,100, soybeans 18,500, in March, 1935. Shipments during the same period were: Wheat 783,625 bus., corn 1,338,810, oats 1,034,598, rye 105,700, barley 167,300, soybeans 111,080, against wheat 1,000,430 bus., corn 214,310, oats 198,177, rye 14,700, barley 31,700 in March, 1935.—C. B. Rader, sec'y Merchants Exchange.

Decatur, Ill., Apr. 18.—Country offerings of corn have been very light, and with a fair demand, premiums on cash corn have been advancing. Plenty of trucks on the roads all the time, hauling shelled and ear corn to southern Illinois, Missouri and Kentucky. Soybean crushers who stored beans in country elevators have been ordering them loaded out, which accounts for most of the daily receipts in some of the markets. Movement from farms is very small, altho a fair amount of beans are back in the farmers' bins.—Baldwin Elevator Co.

Obion, Tenn., Apr. 16.—No wheat in farmers' hands. About 5% of corn in farmers' hands to be marketed.—Fox Grain Co.

Montreal, Que., Apr. 9.—A good number of tramp steamers are reported as chartered for early shipments and the greater part of the available berth space. Berth parcel rates have improved since the opening quotation of 1/9 per qr. in consequence of the excellent demand for space. To British ports the current quotation is 2/— to ⅔ per quarter and to Antwerp-Rotterdam 10½c per 100 lbs.—Board of Grain Commissioners for Canada.

College Park, Md., Apr. 13.—Stocks of wheat on Maryland farms on Apr. 1 were estimated at 707,000 bus. The carry-over on the same date a year ago was 952,000 bus. The five-year (1928-1932) average is 1,149,000 bus. Stocks of corn on farms are considerably higher than either those a year ago or the average. Apr. 1 corn stocks of 8,179,000 bus. compare with 6,625,000 bus. on Apr. 1 last year and the Apr. 1 average of 5,595,000 bus. Light carry-over of oats.—Maryland Crop Reporting Service.

Peoria, Ill.—March receipts of grain were: Wheat 100,800 bus., corn 2,088,300, oats 376,000, rye 193,200, barley 415,600, soybeans 100 cars, against wheat 43,200 bus., corn 1,070,050, oats 100,250, rye 164,400, barley 246,200, soybeans 67 cars, in March, 1935. Shipments during the same period were: Wheat 92,400 bus., corn 708,400, oats 390,000, rye 38,400, barley 194,600, against wheat 43,200 bus., corn 547,000, oats 114,000, rye 43,200, barley 145,600, in March, 1935.—John R. Lofgren, sec'y Board of Trade.

Stocks of Grain on Farms

Washington, D. C., Apr. 10.—The Apr. 1 farm holdings of 97,053,000 bus. of wheat were, except for the 93,456,000 bus. reported on Apr. 1 last year, the smallest since the spring of 1928, when they stood at 86,477,000 bus. The largest Apr. 1 holdings in the intervening years were in 1933 when they stood at 181,781,000 bus. while the 5-year (1928-1932) average holdings at that date have averaged about 127,000,000 bus. The indicated disappearance of wheat from farm stocks since Jan. 1 was 62 337,000 bus., compared with an average of 44,048,000 in the corresponding period last year and with an average of about 121,000,000 bus. in the 5-years, 1928-1932, being the smallest except for last year during the years 1927 to date.

Farm stocks of corn on Apr. 1 were estimated at 776,112,000 bus., which was about 19,000,000 bus. greater than the average Apr. 1 holdings of the 5 years, 1928-1932, which period included the short crop year 1930, and nearly 340,000,000 bus. greater than the record small holdings of 436,337,000 bus. in 1935. By contrast, Apr. 1 holdings in 1933 were 1,128,122,000 bus. The disappearance of farm stocks from Jan. 1 to Apr. 1 this year amounted to 566,796,000 bus., compared with the 5-year average disappearance of 632,000,000 and with 374,142,000 bus. for the like period in 1935.

Estimated farm stocks of 494,666,000 bus. of oats on Apr. 1 were the largest since 1926, and well above the 5-year Apr. 1 average of about 389,000,000 bus. Stocks were particularly large when contrasted with the very short stocks of 206,541,000 in 1935 and 275,425,000 bus. in 1934. Disappearance of farm stocks of oats since Jan. 1 amounted to 276,786,000 bus. compared with a 5-year average disappearance of about 300,000,000 bus. and of 137,238,000 bus. in 1935.

Apr. 1 farm holdings of wheat by classes amounted to approximately 22,000,000 bus. of hard red winter, 24,208,000 bus. of soft red winter, 5,768,000 bus. of white winter, 31,707,000 bus. of hard red spring, 3,823,000 bus. of white spring and 9,547,000 bus. of durum.—U. S. Dept. of Agriculture.

Canadian Elevators

The grain elevators of Canada totaled 5,870 in number and 520,643,920 bus. in capacity on Dec. 1, 1935, as reported by the Department of Trade and Commerce.

Public country elevators numbered 5,718; private country elevators, 11; mill elevators, 28; private terminal elevators, 38; public terminal elevators, 6; semi-public terminal elevators, 39; and eastern elevators, 30.

The country elevators had a capacity of 189,931,800 bus. On the Canadian Pacific were 3,164 elevators and on the Canadian National 2,511. Saskatchewan had 1,713 elevators, Albert 993, and Manitoba 413.

Line companies operated most of the country elevators, the Saskatchewan Pool Elevators, Ltd., having 1,069 Alberta Wheat Pool 424, Federal Grain Co. 399, Alberta Pacific Grain Co. 347, Searle Grain Co. 326, Western Grain Co. 249, and Pioneer Grain Co. 215.

Jobbers to Buy Hand-Picked Beans Only

Thirty-five elevator operators and bean jobbers attending a meeting of the Central Michigan Grain Dealers Ass'n at Owosso, the evening of April 2, unanimously endorsed action taken by the Michigan Bean Jobbers Ass'n late in March, whereby the jobbers agreed to buy only hand-picked beans from the elevators. A certificate of guaranty that the beans have been hand-picked must accompany each shipment.

The agreement by the jobbers requires the elevators to place an inspection tag on each bag of beans, indicating the grade. No. 1 grade is specified as "choice hand-picked;" No. 2, "prime hand-picked," the difference being in color. No. 2 is permitted to be slightly off color.

Said Fred Cornair, Owosso, after the meeting: "The Great Northern bean, which has been in competition with the Michigan beans, has been selling at a premium over the Michigan product on the terminal markets. This condition has been due to the poor quality of Michigan beans. The curtailed demand for the Michigan beans affected the price to the grower.

"Ten years ago the Great Northern beans sold from 50 cents to $1 under Michigan beans. It is the contention of the jobbers that if we are to maintain the Michigan bean industry we must put out a quality that is on a par with Great Northern beans. We believe hand-picking is the best way to put the Michigan beans back in their former position."

A Weighing Charge of 2 Cts. a Bushel for Truckers

How to preserve a volume of grain business which will warrant continued year-around operation of the grain elevators was the problem before a group of 20 central Illinois grain dealers, meeting in the office of Spellman & Co., at Lincoln, early this month. Lester Fielding of Hartsburg, presided.

The movement of corn by truck has increased as truckers from Missouri, and southern and western Illinois have ranged farther and farther in their search for grain to satisfy the home demand. These truckers have shown increasing disposition to go around the grain elevators and buy direct from the farmers.

Farmers are naturally delighted with the high prices offered, but insist that the grain be weighed at the local elevator, and often expect the elevator operators to effect the settlement with the itinerant trucker.

Dealer after dealer pointed out the impossibility of maintaining satisfactory elevator facilities, if the good corn in their communities were sold to truckers direct, leaving only a small volume of poor and off grade corn for the elevator to handle. Upon a volume of business depends the life of an elevator and its low cost service.

Each of the dealers present expressed his conviction that a full margin of 2c per bushel should be charged itinerant truckers for weighing service. Costly, large capacity scales are required to weigh the huge trucks used in this long distance hauling.

Each dealer felt that farmers should be educated to the dangers of dealing with the itinerant truckers, because so many farmers have experienced heavy losses thru falsification of weights, worthless checks or pilferage. Farmers would be money ahead if they confined their grain sales to local elevators.

A meeting of the same group of dealers is scheduled for next month, at which they will again compare experiences, and seek means for solving the problem.

In their attack on the order by Sec'y Wallace fixing their charges for services the live stock commission firms of Kansas City told the court that the order was "based upon his own untrammeled judgment and not upon the evidence.

Up-to-Date Elevator at Ruthven, Ia.

Weakened with age and unable to handle large trucks, the elevator of the Farmers Co-operative Elevator Co., at Ruthven, on the C., M., St. P. & P. R. R. in Northwestern Iowa, was relegated to the storage of oats, while a 30,000-bus. cribbed elevator 28x31x45 feet, meeting all requirements, was erected near by, both houses being shown in the engraving herewith.

The foundation is a reinforced concrete slab 5 feet down in the ground to prevent settling. On the slab walls of concrete rise to the proper height for the superstructure. This complete concrete floor under both elevator and office prevents vermin undermining the foundation, and with the large steel boot tank prevents water rising into the full basement.

The four deep corner bins and 8 hopper bottom overhead bins form a maltese cross work floor. Next to the work floor is the driveway, 14 ft. wide, and beyond that the office, 16x36 ft., one of its two rooms being a private office, and the other divided into two parts by a special desk with swinging gate into a customer's waiting room and room for manager and bookkeeper, the beams of both the inside and outside scales being located in this last mentioned office.

The equipment includes one leg with D. P. buckets and a capacity of 3,500 bus. per hour driven by a 7½-h.p. electric motor thru a Winter Universal worm gear, a Carter Cleaner, a 10-bu. Richardson Automatic Scale in the cupola, and several special sacking devices on the work floor for retail purposes.

Outside of the building is a 20-ton, 24-ft. Fairbanks Truck Scale with a concrete deck for weighing coal and for commercial weighing for the town. In the driveway is a 20-ton, 26-ft. Howe Dump Scale using a Strong-Scott Compressed Air Truck Dump.

Two slides in the hopper under the automatic scale run grain either to box cars or back into the house; and a farmer's spout runs from the cupola to the driveway for loading trucks in the driveway.

The driveway has doors 12 ft. wide and 13 ft. high, to accommodate trucks with stock racks. Special hardware was used on both approach and exit doors of the driveway so that the doors would fold up alongside the wall behind the driveway posts to prevent stock racks from coming into contact with the doors. The driveway level is only two feet above the ground level.

The office can be entered from the driveway or from the outside. A door in the basement of the office gives access to all portions of the elevator and to basement under scale. The office has a full basement, wash room and shower bath. It has maple flooring thruout.

A Strong-Scott Manlift was installed for access to cupola and spout floors. The entire plant is covered with 2-oz. coated 26 gage, 1¼ in. corrugated elevator plate on the walls and 26 gage galvanized pressed standing seam roofing on the roofs.

The plant was designed and erected by the T. E. Ibberson Co.

The manager of the elevator is Fred Grange, who has been with this successful company for 20 years.

The New Elevator in Foreground Was Built at Ruthven, Iowa, to Handle Larger Loads.

Wants Floods Controlled at Source

"Our work in 141 watersheds thruout the country the last two years indicates that the volume of runoff water can be reduced 20% to 25% thru the use of erosion control methods," says H. H. Bennett, Soil Conservation Service, U. S. Department of Agriculture. "This is the margin between high water and destructive floods.

"No permanent control of floods is possible until we have control of erosion over entire watersheds from the crest of ridges down across the slopes where floods really originate and where soil is picked up to choke streamways which have only a limited capacity for carrying water to the sea."

Flood control, believes Mr. Bennett, should start with curbing the excess runoff of rainwater on sloping lands. Supporting him is Dr. F. B. Howe, professor of soils at Cornell University, who says New York experiments show runoff water from an acre of corn land is 127,129 gallons greater than from an acre of meadow in a normal growing season. "I am of the opinion," says Prof. Howe, "that the flood problem in central-southern New York has partially been created and to a considerable extent aggravated by improper land use."

Long Range Weather Forecasting

Generally speaking, says W. R. Gregg, chief of the Weather Buro, there is little optimism in Europe over the results of extensive investigations in long-range weather forecasting. Investigations of cycles there have seemed to give encouraging results, only to break down with a succession of failures for a similar period. The Union of Soviet Socialist Republics issues weekly forecasts covering a month in advance, but this system has not been in operation long enough to permit a fair appraisal of its dependability and value.

Any useful and scientifically reliable long-range forecasting method developed by the department's present surveys, Sec'y Wallace says, will, of course, be used by the Weather Buro in extending the range of its forecasts, now limited to predictions of what the weather will be 24 to 36 hours in advance, supplemented by a more general weekly outlook.

The scientific soundness of various methods of making long-range weather forecasts is being studied by the U. S. Department of Agriculture with funds allocated from the Bankhead-Jones appropriation for stimulating basic research affecting agriculture.

That there is a tendency for the weather to move in cycles, from extremely cold to extremely hot and then back again to extremely cold, is evident in some parts of the country from recent correlations of records kept by several Weather Buro stations.

Members of the Chicago Board of Trade are so deeply interested in long range forecasting as indicating crop outturns they have given much study to the problem. The late John Barrett and several others have achieved some reputation, Mr. Barrett having been good on three months' periods.

Chas. Heath is a thoro believer in the cycle theory of recurrence of heat or cold, wet or dry weather. His studies lead him to conclude that six months after a cold period there would occur a hot period, which has application to temperatures next fall. Also Mr. Heath holds with the French that an abnormal weather condition as drouth, will persist for three years, which seems to be about to come true in Southwestern Kansas this summer.

Mr. Heath takes a fall out of a Northwestern scientist reciting records of lake levels and who declared there was no cyclical recurrence, when the scientist's own figures prove the 11-year cycle, the professor being too dense to observe the cycle right under his nose.

The cycles are there, too many of them, their differing periodicity sometimes neutralizing their effect, and leading the student astray. When all the different cycles have been found, tagged, and labeled, just as the paths of the heavenly bodies have been mapped, the weather forecaster should be able to predict the weather on a certain day months ahead just as the astronomer confidently sets the day, hour and minute of an eclipse.

In 1933 our corn wizards had no means of knowing whether the next year's corn crop would shell out at three billion or one and a half billion bushels. Yet they announced with all assurance that by reducing the acreage exactly 20 per cent the 1934 crop would be precisely the size to meet the demand. As a matter of fact the crop barely topped a billion, and we had to import over 43,000,000 bus. for home use. Even after offering up six million pigs on the altar of experimentation there was no more basis for prediction than that which the familiar forked stick or divining rod furnishes.—E. V. Wilcox, sec'y Farmers Independence Council of America.

The Cotton Pool Graft

The American Cotton Co-operative Ass'n is not a co-operative in fact, its net capital is only $36,350, but it has obtained from the government $3,836,213.01 for services and expenses, besides costing the government a loss of $140,000,000 in cotton transactions, according to the report made Apr. 10 by Mr. McKellar of the senate com'ite on appropriations.

The Senate Com'ite makes the following very severe indictment of the grafters who have misused the name "co-operative" to create a pipeline for themselves into the public treasury:

The A. C. C. A. and its affiliates above named are not cotton cooperatives within the spirit and letter of the Capper-Volstead Act, or in any other sense cotton cooperatives, for the following reasons:

The commonly accepted definition of cotton cooperatives, as disclosed by the undisputed evidence, is that it is an organization of cotton farmers for the purpose of selling their cotton for better prices and at a lower handling cost, and of otherwise marketing their cotton to mutual advantage, in which organization, where there are profits, all the members shall share in them, and where there are losses each member will be assessed for its or his respective share of the losses. This definition is in keeping with that stated by the National Cooperative Council of which President Williamson, of the A. C. C. A. is a member:

> **Business cooperatives** are created by farmers as agencies through which they collectively sell their products or purchase their supplies. Such cooperatives, being owned and controlled by the members, should at all times have the wholehearted participation of those members in the risks, gains, and losses of the business operations. Therefore the members, in building such cooperatives, should invest therein substantial amounts of their own funds commensurate with the needs of the business (vol. I, p. 166).

Now, under this definition and under the proof taken by your committee, it is perfectly clear that the American Cotton Cooperative Ass'n is in no sense, except in name, a cotton cooperative association at all. This is apparent by applying the following facts to this definition:

1. The profits are not divided equally or proportionally, even assuming that there have been profits, and this is a doubtful assumption (Henry, vol. I, pp. 204-205; vol. II, exhibit 6).
2. The losses are not made good by the so-called member (Creekmore, vol. I, pp. 18, 47, 159, 282; Williamson, vol. I, p. 330).
3. The so-called members do not invest therein substantial amounts of their own funds and have never done so (membership fee only, Cannon, vol. I p. 458; Smith, vol. 1, p. 624; Stewart vol. I, p. 336).
4. The so-called members have not the slightest control over the marketing of their cotton (Henry, vol. I, p. 228).
5. The so-called members take no risks. The only risk taken in the business at all is the risk taken by the Government (Henry, vol. I, p. 191).
6. They do not sell collectively (vol. II, exhibit 20; Henry, vol. I, p. 205; Creekmore, vol. I, p. 157).
7. The A. C. C. A. is not owned or controlled by its so-called members (Creekmore, vol. I, pp. 155-156).
8. It is owned and controlled by its officers (Creekmore, vol. I, pp. 155-156).
9. The members are not directly responsible for losses which the cotton operatives may incur as a result of operation (House, vol. I, p. 492; Creekmore, vol. I, p. 47).
10. Profits if any, have not been distributed to the individual producer members except in one instance, and even then not to the members of all of the affiliated associations, during an existence of 5 years (Creekmore, vol. I, p. 26).
11. The methods of securing members are of doubtful legality and oftentimes of plain duress (Baker, vol. I, pp. 530-533; Waddell, vol. I, p. 537; Lattimer, vol. I, p. 552; Salvo, vol. I, p. 547).
12. Operating on Government money, which forms the basis of its credit, the A. C. C. A. makes loans to its affiliated associations, which have gone through an evolution as its officers claim (Hutchinson, vol. I, p. 374), whereby all cooperative features have been eliminated and the cotton cooperatives are simply operating as cotton merchants (Thompson, vol. I, p. 542; Valentine, vol. I, p. 478; Reed, vol. I, p. 483; Mitchell, vol. I, p. 544; Everett, vol. I, p. 479).
13. In dealing with its so-called members, the organization frequently resorts to what may be called duress in padding its so-called membership rolls (Creekmore, vol. I, p. 14).
14. The prices paid by the A. C. C. A. to its so-called members are not higher than those paid by private cotton merchants (Gibson, vol. I, p. 545).
15. The cost of handling is greater than when sold by private cotton merchants (Salvo, vol. I, p. 548; Henry, vol. I, p. 196).
16. The A. C. C. A. is not cooperative in fact, but is composed of a closely knit organization with an interlocking directorate largely composed of its affiliates, all of which makes it simply a cotton merchant, buying from substantially any seller at the cheapest price possible and charging the farmer a very high cost for handling his cotton (Creekmore, vol. I, pp. 155-156; Valentine, vol. I, p. 478).
17. It has no county or local organization which meets and passes on their problems and since the organization of the A. C. C. A., has not had (Everett, vol. I, p. 481).
18. It violates the Capper-Volstead Act in that it has bought more bales of "futures" than it has bought actual cotton, and "futures" were not bought from the so-called members (Creekmore, vol. I, pp. 107-109).
19. It violates the Capper-Volstead Act in that it has formed a closely knit corporation with its affiliates by which a minority of the members completely controls and dominates the other members of the association, and this is contrary to the first requirement that no member shall have more than one vote (Creekmore, vol. I, p. 155).
20. It is of no more value to the farmer than is Weil & Co., McFadden & Co., Anderson-Clayton & Co., or any other large cotton merchant (Reed, vol. I, p. 483; Sanders, vol. I, p. 486; Hermes, vol. I, p. 489).
21. Finally, in essence, it is simply the Government, acting thru a few favored persons, engaging in the cotton business competing with other private cotton merchants, sometimes putting such other merchants out of business and reducing many of them to penury and want, the Government taking continued, drastic, and almost inconceivable losses, due in many instances to gambling in cotton, without the slightest benefit to the farmer or to the Government, the only benefits going to the small coterie of officers and agents of the A. C. C. A. and its affiliates.

It is hoped that these disclosures will lead to the investigation of Government financed grain cooperatives.

Insurance and Speculation

One of the leading financial publications of America, noted for sound thinking along economic lines, recently devoted its attention to commodity futures markets and to the part played by speculation in moving farm crops into the channels of consumption.

The views expressed are particularly pertinent, now that public hearings on the proposed Commodity Exchange bill are being held by the Senate Committee on Agriculture in Washington.

"Commodity futures markets," stated the editor, "perform an essential function which the producers of the commodities have, apparently, never fully understood, and concerning which they have always been suspicious.

"The essence of all such markets is to furnish insurance to all concerned in the processing and distribution of these things in their passage from the earth to the final consumer.

"Insurance is by its nature speculative. Consequently the speculator is an indispensable factor in these markets. It is he who furnishes the insurance to the various commodity trades. No one else can do it. It is he who assumes the risks of price fluctuations during the period that must necessarily elapse before the grain is eaten and cotton is worn.

"If there is anything certain it is that from the inception of the futures markets to the present day," the publication continued, "the sum total of the speculative operations which have enabled the trade to 'hedge' its risks have been conducted at a loss.

"The trade, in short, *as a whole*, has had its insurance for nothing and a bonus to boot. And the greater the volume of speculation, the larger has been the bonus!"

First Suspension Roof Elevator in Canada

The honor of building the first grain elevator in Canada with the suspension type of metal roof has fallen to enterprising Norman M. Patterson, whose "Doc" line of grain steamships has become familiar on the Great Lakes.

The first elevators of this type anywhere were erected near Omaha, Neb., and at Albany, N. Y.; their merit being large volume of grain storage at minimum cost, ignoring whatever hazard there may be in placing so much grain in one bin.

This elevator, shown on the outside front cover page, was designed and erected for N. M. Paterson & Co., Ltd., on the Kaministiguia River at Fort William, Ont., as an annex to a large concrete elevator having adequate facilities, by the Fegles Construction Co.

From Abroad

W. P. Cook, for 40 years representative of the Bartlett-Frazier Co. in the English market, died at Liverpool Apr. 7.

Kristiansand, Norway, has a new elevator of 6,000 tons capacity, built for Aktieselskapet Christiansands Moller. The discharging plant is pneumatic.

Enlargement of 10 and construction of 27 elevators is planned by agricultuarl com'ites who have applied to the government of Poland for financing.

The Philippine government has taken over supervision of the national rice and corn commission, which has been given a loan of $1,000,000 to stabilize grain prices.

The Norwegian government contemplates erection of several elevators to accumulate a year's supply within the country. One of the houses is to have a capacity for 30,000 tons.

A full cargo of Argentine oats and barley required 105 days to discharge at the Italian port of Massawa in Eritrea on the Red Sea. Gangs of natives used their hands as shovels in filling sacks. The vessel was the British tramp steamer Appledore.

Storing surplus Canadian grain in Britain was suggested in parliament Apr. 7 by Capt. A. C. Graham, urging that Walter Runciman, pres. of the Board of Trade, discuss the matter with the Dominion. Broomhall reports that stocks in the United Kingdom are below normal.

Czecho-slovakia's ministry of agriculture plans to subsidize the export of 10,000 carloads of wheat to Western Europe in an attempt to work off the surplus. It is said the government contemplates distribution of 100,000 tons of wheat to the unemployed in the form of flour.

Reclamation projects now under way in Germany cover an area of approximately 3,000,000 acres, according to a report from Agricultural Attache L. V. Steere in Berlin. Within the next two years it is expected that approximately 600,000 acres of that area will be available for the production of food.

Another Grain School

A complete review of grain grades, variety identification, plant disease control, and the "thousand and one" questions which farmers ask the grain men is being conducted for members of the Minneapolis Chamber of Commerce. Five two-day classes on wheat and a similar number of classes on barley are being offered by the Federal Grain Supervision Office and the Northwest Crop Improvement Ass'n. Over 200 enrolled "pupils" with a wide range in both age and grain experience seem to enjoy and value the school work which is presented by M. J. Johnson and R. H. Black of the Grain Supervision Office and H. R. Sumner of the Crop Improvement Ass'n.

The purpose of the Grain School is to give the Minneapolis group the same general information and review which has been so successfully presented to hundreds of local buyers throughout the Northwest during the past five years. The local grain buyer has a tremendous influence on the crop production methods of the farmer. Any assistance which will help the elevator manage to give better service to his customers is a worthwhile undertaking.

The class work is a mixture of laboratory and lecture, so interwoven that neither becomes tiresome. One real value of the schools lies in the personal supervision which is given to each student in his laboratory work and in explanation of individual crop questions. A description of the wheat and barley courses is presented in the following brief outline.

Wheat Class

FIRST DAY—Introduction of members. Starchy and Amber Durum—Explanation, laboratory practice causes, grading, market value. Ergot in durum. White wheat and durum—description, laboratory practice, identification in field, laboratory work, change of durum into white, grading influence, market value. The durum area. Durum varieties—field identification and value, kernel identification, laboratory study. Review of durum grades. Scab, Blight and Stem Maggot injuries.

SECOND DAY—Red durum and hard spring—description of two, laboratory practice, market value, grades. Hard Red Spring—varieties recommended, field identification, kernel identification, laboratory study. Smut and Black Chaff. Laboratory Separation of Four Wheat Classes. Review of Hard wheat grades. Causes of wheat mixtures.

Barley Course

FIRST DAY—Introduction of members. The malting barley area. Mellowness and Flintiness—description, laboratory practice, causes, laboratory work, market value, grades. The malting process. Skinned and Broken—description, laboratory practice, market value. Barley Smut and Stripe. Heat and weather damage—laboratory work.

SECOND DAY—Barley Variety—varieties recommended, field identification, laboratory work in kernel identification, malting values, grades. Blight in Barley—field identification, laboratory work, grades. Review of Barley Grades. The Grain Man in Crop Improvement Work.

The enrollment for the schools totals 265 men.

The enrollment for the fifth school includes eight from the Federal Grain Supervision Office; sixty-six from the State Grain Inspection Department and twenty-two from The Chamber of Commerce Sampling Department.

Books Received

KASCO POULTRY GUIDE is a credit to the compiler who has condensed into 68 pages about everything a poultryman needs to know in caring for the birds. The different methods of feeding, laying and breeding flocks are described. The data make the pamphlet valuable for reference. Copies will be supplied without cost to any feed dealer, grain elevator man, poultry supply dealer or poultryman located east of the Ohio-Indiana state line, by the publishers, the Kasco Mills, Inc., Toledo, O.

GRAPHS and their Application to Speculation tells how every kind of graph and chart is constructed, explains the principle behind each graph and how to forecast the future course of prices therefrom. The book treats of daily factors and indications, daily analysis of the market, top and bottom formations, congestions, Gregory King's law of prices, finding the major objective, mechanical rules, hedging and privileges. The author proves by his interpretation of market graphs that the action of the market price reflects the psychology of the mass mind as pictured in the graph, that the future trend of prices of all commodities is based on the law of recurrence of past price movements as recorded in graphs. The author critically analyzes the theories of the leading writers of the day on speculation, always with an eye to practical application, in some instances giving records of profits and losses by following a stated system. The whole is written so the novice may understand, and the text matter is profusely illustrated with 29 diagrams. By Geo. W. Cole. Cloth, 278 pages, price $7.50. Published by the author, Board of Trade Building, Peoria, Ill.

For Hogs during the first three months of 1936 farmers obtained $24,496,000 at Chicago for 1,010,147, compared with $21,367,000 for 1,125,920 hogs in the first quarter of 1935. During the first three months of 1934 only $16,490,000 was paid for 1,926,793 hogs.

Henry Ford's Fireproof Elevator at Dearborn, Mich.

Truck Operating Costs

"Well planned routes, designed to increase the daily use of trucks and to reduce idle time," says the survey on truck operating costs, made by the Metropolitan Life Insurance Co., "help to keep down costs.

"The number of miles a truck is operated per day affects the costs to a considerable degree i.e., a high mileage gives the lowest cost per mile. However, a truck should not be run extra miles merely to get a low cost per mile. It is the total cost per ton, or piece, delivered a given distance that really is worth getting low."

A uniform expense classification was used in the compilation of data for the company, including 21 items. These are: Variables: Gasoline, oil, tires and tire repairs, repair material used on chassis, repair material used on cab, body, or auxiliary equipment, labor on chassis, labor on cab, body or auxiliary equipment, painting labor and material, accident labor and material, garage labor, garage material, miscellaneous expense. Fixed operating expense: Drivers' and helpers' wages, garage rent and maintenance, insurance for vehicles, licenses and taxes, depreciation, superintendence, interest on investment, overhead, and administrative expense.

Consolidated records on the operating costs of 46 fleets showed variable costs of .0314c per mile in the 1½ ton classification, the size most commonly used by grain dealers. The average mileage covered per week was 382, the average mileage since purchase, 55,003, average variable cost since purchase, .0379c per mile.

In a survey of motor truck operating costs made by the General Motors Truck Co. in 1929, 124 units operated by grain elevators and mills were included. The records of costs on these units showed the following averages: Miles per gallon gasoline, 13.2; miles per quart oil, 113; average pay load, 3,207 lbs.; average length of haul, or route, 18.5 miles; stops per day, 29; operating costs in cents per mile (including maintenance and depreciation), 9.9.

Many grain dealers perform a delivery service on their retail lines, and a pick-up service on grains. It is important to know costs on this service in order to adjust buying or selling margins. Use of standard cost record forms, that include all items, will help take the guess work out of pick-up or delivery costs.

Henry Ford's Concrete Elevator

In a World's Fair exhibit Henry Ford demonstrated his theory about industrialized farms. Adjacent to two small patches of growing soybeans was a barn, built in 1863, which housed a factory for making soybean products.

A small steam engine supplied power for the shafting, and steam for the heat needed in processing soybeans.

The machinery included solvent equipment for removing the oil from soybeans, machinery for pulverizing the meal and mixing it with other ingredients, pressing and molding equipment for making it into horn buttons, distributor casings, handles, and similar items often made from bakelite, or hard rubber. The oil is used in making paint.

Mr. Ford has been experimenting with this idea for several years. Near his Dearborn, Mich., plant are fields of soybeans, and on the Ford properties is a 100,000-bu. reinforced concrete elevator that serves the Ford farms.

In this 10-tank structure is a Hess Drier which has been of material aid in the experimenting, drying the soybeans down to a moisture content suitable for processing.

The elevator is modernly equipped with electric power, and grain handling machinery, and, as is true of all Ford properties, is kept scrupulously clean.

Grain Elevator Modernization

By P. F. McAllister

The U. S. A. has three distinct types of elevators, viz., terminal, milling and country, and of course we have plenty of variances as to design of these types.

The terminal and milling elevators are kept in better condition and more modern for several reasons:

1.—Because they are usually owned by corporations, who are demanding efficiency at all times.

2.—Because these plants are located in industrial centers, as a rule.

3.—Because they are subject to more frequent inspection by constituted insurance authorities who advise them from time to time to make certain changes in order to earn scheduled credits on their fire insurance premiums.

As for the country elevators, which with a few exceptions are cooperative or individually owned, we find the greatest demand for repairs and modernization.

Following are some of the improvements nearly every elevator needs now, especially after six or seven years of idling and stagnation.

1.—Elevator leg alignment.
2.—Replacing plain old style bearings with modern anti-friction bearings.
3.—Painting.
4.—Driveway modernization including driveway doors.
5.—Improve drainage or install sump pumps.
6.—Reline or replace worn out spouts.
7.—Repairs to cracked or crumbling concrete elevators.
8.—Waterproof coating to concrete bins.
9.—Inspection of old scales or replacement with larger and stronger scales.
10.—Replacement of open electric wiring system with new conduit system.
11.—Installation of vapor proof lamps and guards.
12.—Replacement of open type motors with totally enclosed motors.
13.—Replacement of motor starting equipment with modern explosion proof fixtures.
14.—Install standard lightning protection and reduce insurance cost.
15.—Window screen spark arresters.
16.—Removal of cob and dust bins if adjacent to elevator.
17.—Replacement of gasoline engines by diesel auto motive type of engines.

Items Nos. 1, 3 and 6 are purely a matter of maintenance. All other items are a matter of negligence, indifference to progress or unwillingness to increase investment.

Item No. 2 has particular reference to replacement of plain bearings with anti-friction bearings, the benefits being a saving of 10 to 20 per cent in power and the correction of fire hazards.

Item No. 4 has reference to enlargement of driveways, installation of modern dumping machinery; installation of floor gratings and installation of "Roll Away Doors" either hand or electrically operated.

All of these are brought about by the adaptation of motor trucks to grain hauling.

Item No. 5; many elevators are inadequately drained either naturally or mechanically. Tile drains have their advantages and disadvantages. Their disadvantages being that sooner or later they fill up with infiltrations and sometimes they return water from their outlets to the elevator, especially in times of heavy rains or floods.

The best system is to construct a watertight basement and install an automatic sump pump especially where electric current is available.

Items Nos. 7 and 8 have particular reference to many concrete elevators that have developed cracks and disintegrated spots or surfaces. Concrete may be permanent, nevertheless it is subject to great temperature changes and porosity. Porosity is followed by water absorption, freezing, spalling and disintegration eventually resulting in collapse of walls. Some reputable concerns make permanent repairs of cracks and disintegrated sections and then treat the entire surface with a waterproofing material guaranteeing their work for a period of five years with a surety company bond.

Item No. 9. All scales should be inspected periodically by some authorized inspection service. Many wagon and small truck scales are being replaced with larger ones but not nearly so many as should be. No one should install a scale smaller than 20 tons capacity and 32 ft. long unless they want to make another replacement in a few years.

Items No. 10, 11, 12 and 13 have reference to modernizing the entire electrical equipment of an elevator. Some elevators may need only one or two of these items and some may need the entire system replaced. It is certain that the insurance premium can be reduced if requested. Cooperation with one's fire insurance company is essential and desirable.

Item No. 14 needs no explanation, all it needs is action and installation by a reputable manufacturer.

Item No. 15. "Sparks from a locomotive" is a common cause of elevator fires. This can easily be prevented by means of a reasonably close mesh heavy gauge galvanized hardware cloth. The operator should see that these screens are cleaned frequently.

Item No. 16. All too many elevators in the corn states have cob and dust houses attached for which they are paying an insurance premium penalty. These cob and dust houses should be replaced with new buildings at a proper distance from the elevator or substituted with a cob burner properly equipped with fireproof spouts and screen tops to prevent flying sparks and communication of fire from the burner to the elevator cupola.

Item No. 17. Many country elevators are still located at a remote distance from electric power lines and some owners would change to electric power if they could secure the current at a price somewhere near what their gasoline engine costs. The automotive industry developed the multiple cylinder engine and now we have the multiple cylinder diesel engines for industrial power uses. These engines are adapted for direct power take off, belt take off or direct connection to electric generators. It is now possible for an elevator owner to have his own electric power and light at a cost of less than 1c per K.W.H.

Any elevator owner interested in a change of power should look into the merits of the diesel engine whether it be a 25 H.P. unit or 500 H.P. unit.

These units are used extensively in nearly every industry while the grain industry plods along in the old fashioned way.

I read about farmers' companies paying 25%, 50%, 100% dividends all of which is very nice, but have these companies improved their properties or kept them in good repair? Don't forget, Mr. Owner or Mr. Manager, there is always a day of reckoning, so why not make an inspection of your plant and map out a plan for reconditioning and modernizing your plant before the new crop starts to market?

Two benefit checks totaling $60.29 for curtailment of wheat acreage on a farm in which Justice Willis Van Devanter of the United States Supreme Court was interested were returned by him with the statement that since the law had been declared unconstitutional he did not feel that he should accept the payments.

Cipher Codes

Universal Grain Code: Most complete, up-to-date grain code published. Effects a greater reduction in tolls than any other domestic code. 150 pages, 4½x7 inches. Price, leather, $3.00; paper, $1.00.

Robinson Telegraph Cipher Code: Revised with all supplements, for domestic grain business. Leather, $2.50; cloth, $2.00.

Dowling's Grain Code for Grain Milling and Produce Trades, 6th edition: Used extensively in Western Canada. 154 pages. 4¼x6¾ inches. Weight 4 ozs. Price $3.00.

Millers Telegraphic Cipher: (1927) For the milling and flour trades. 77 pages, 3¾x6 inches. Cloth bound. Price $2.00.

Cross Telegraphic Cipher: 10th edition revised for provision and grain trades. 148 pages, 4½x5¾ inches. Cloth $4.00.

A. B. C. Improved Fifth Edition with Sup.: Reduces cable tolls 50% thru use of five-letter words, any two of which may be sent as one. In English. Price, $20.00.

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Peerless Grain Code for international grain and feed trades. 300,000 different offers expressed by one half codeword combining Destination, Time of Shipment, Quantity, Quality and Price. 10,000 complete Phrases relate to Export grain trade. Private Supplement contains 3000 blank code words. Price $85.00.

Baltimore Export Cable Code: Hinrich's fourth edition, completed especially for export grain trade. 152 pages, 6½x9 inches, bound in leather. Price $15.00.

Riverside Flour Code, Improved (5 letter revision): Sixth edition. For use in domestic and export trade. Size 6x7 inches, 304 pages. Bound in flexible leather. $12.50.

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Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

CANADA

Greenwood, Ont.—F. L. Green's flour mill burned recently. Its capacity was 75 barrels.

Ft. William, Ont.—A joint com'ite of the Chambers of Commerce of Ft. William and Port Arthur held a special meeting, on Apr. 15, in the offices of the local chamber, in the Grain Exchange Bldg., to discuss grain freight rates. The chairman of the meeting was Norman M. Paterson.

Owen Sound, Ont.—The Great Lakes Elvtr. Co. has agreed to pay the city of Owen Sound the sum of $255,000 as full discharge of obligations to the municipality. In 1925 the city, under an agreement according to which a company would be formed to purchase, passed a law authorizing the raising of $450,000 for the erection of a 1,000,000-bu. elevator. The elevator was built and its capacity has since been increased to four times the original capacity.

COLORADO

Denver, Colo.—Contract for the 400,000-bu. elevator and 1,000-barrel mill to be erected here by the Omaha Flour Mills Co., as previously reported, has been given to J. T. McDowell. Work started last week and will be completed in about four months. Horner & Wyatt designed the new plant.

Holyoke, Colo.—M. T. Frederick, manager of the Farmers Co-op. Elvtr. Co.'s elevator at Brandon, Neb., for the last three years, has been appointed manager of the Holyoke Farmers Co-op. Elvtr. Co.'s elevator, succeeding Harvey Tomlin, who has acted temporarily in that capacity for several weeks.

ILLINOIS

Belleville, Ill.—Imbs Milling Co. on Apr. 2 received damage to its plant by wind.

Chenoa, Ill.—C. W. Parry has just installed a new 15-ton truck scale at his elevator.

Brimfield, Ill.—The Brimfield Farmers Elvtr. Co. recently appointed Ike Edwards manager of its elevator.

Oneida, Ill.—The new manager of the Farmers Elvtr. Co.'s elevator is Leo Windish, formerly of Trivoli.

Ashkum, Ill.—Fred Stout, of the Ford-Stout Grain Co., has covered his elevator office with asbestos shingles.

Cadwell, Ill.—It is reported that plans are being laid for the building of a farmers' co-operative elevator at this place.

Basco, Ill.—Bert Hartman has bot the old implement building, moved it to his lot on S. Main St. and will use it for a feed mill.

Spencer, Ill.—The local Farmers Elvtr. Co. has appointed P. C. Allen, former elevator manager at Manteno, Ill., manager of its elevator.

Assumption, Ill.—Ralph Wempen has been appointed manager of the Assumption Co-op. Grain Co.'s elevator. He took over his new duties Apr. 1.

Olney, Ill.—Harvey Hays has sold his interest in the Olney Seed & Feed Co. Under the new organization Linton Vice will remain as active manager of the business.

Perdueville (Paxton p. o.), Ill.—After serving the Perdue Farmers Co-op. Grain Co. as manager of its elevator for 28 years, Philip E. Larson resigned recently and will retire from business.

Springfield, Ill.—The Illinois Mfrs. Ass'n, in a recent letter to Senators Lewis and Dieterich, made a plea for support of the Pettengill Bill to repeal the long-and-short-haul clause of the Interstate Commerce Act., which has lost Illinois manufacturers millions of dollars in western business.

DeSoto, Ill.—The William Dietz elevator burned at 3:30 a. m., Apr. 4, together with 150 bus. of corn, a ton of chicken feed, a new cornmeal mill, a gasoline engine and other equipment.

DeKalb, Ill.—The Conlin Co., incorporated; capital stock, 80 shares p. v. preferred and 120 shares p. v. common; incorporators: Edward M. and John R. Conlin and Philip Quealy; to operate an elevator, sell grain, lumber, etc.

Warren, Ill.—Warren Farmers Exchange, incorporated; capital stock, 480 shares p. v. common; incorporators: Charles H. and Clyde Akins, O. H. Hasley, Leo Appell and John Schadewalt; to deal in grain and farm products.

Maroa, Ill.—The Beall Grain Co. has purchased the Wright Grain Co., and Homer C. Lyman, of Niantic, has been appointed manager of the elevator. The Beall Co. operates elevators at Latham, Bearsdale and Harristown also.

Taylorville, Ill.—Zachariah Hopson, who at one time was manager of the Farmers Grain Co.'s elevator here for a period of eight years, and who was also well known in politics and social life, died at his home at this point on Mar. 12, at the age of 80 years.

Washington, Ill.—After being manager of the Co-op. Grain Ass'n's elevator here for several years, Rev. Ben Esch resigned recently in order to devote his entire time to his church, and will be succeeded by Herman Steging, who will work with Mr. Esch until the latter's retirement July 1. Mr. Steging has been with the Turner-Hudnut Co. at Pekin for several years.

Shabbona, Ill.—The W. H. Herrmann Grain Co.'s two-story, 20x40-foot warehouse, reported in the Journals last number as having been completed, will be used for feed and seed. Construction is frame, iron clad, with bird-proof eaves. The warehouse is close to the railroad spur, which makes it handy for unloading cars. The first floor is at truck bed level. A lift between the first and second floors will be installed.

Abingdon, Ill.—Abingdon Milling & Cattle Feeding Co., incorporated; incorporators: Ralph Niles, John Turney and George S. Schugmann; capital stock, 2,000 shares of stock of no par value; to deal in agricultural products of all kinds. The old Abingdon Milling & Cattle Feeding Co. closed on account of low prices of feeds early in the depression, and late last year the new concern started operations in the plant on S. Front St.

Nashville, Ill.—The old Huegely Milling Co., an institution in Nashville since before the Civil War, but which has been inactive since the disastrous fire of 1934 and during the rebuilding period since, will re-open shortly as the Huegely Co-op. Elvtr. & Milling Co., an entirely new and different organization. A new concrete plant has been built on the site of the old one, but the opening for business has been delayed pending the new setup and final insurance adjustment.

Sheldon, Ill.—The fact that the plant of the Farmers Co-op. Elvtr. Co. receives regular inspection and oiling probably saved it from a serious fire if not destruction recently. One of the main bearings became loose and was tightened and was later discovered by the houseman, in making his rounds, to be red hot.

Lincoln, Ill.—Representatives of 20 country elevators within a radius of about 20 miles of this city met at the office of Spellman & Co. (who operate several elevators, Lincoln being their headquarters) on the evening of Apr. 9, to discuss the problems arising from the operation of truckers in their territories. It was said that in recent months truckers have shown an increasing inclination to ignore local grain dealers and bargain directly with the farmers, who, in some cases, sell grain directly to the truckers and then expect the local elevator to weigh the grain for them and even to make their settlements with these itinerants. It was suggested at the meeting that each dealer make an effort to educate the community in which he lives to a realization of the importance of a good year-around market for the farmer's grain.

CHICAGO NOTES

New members of the Board of Trade include Henry N. Rowley and Francis D. Frost, Jr., the latter of Los Angeles, Cal.

John E. Brennan, a member of the Board of Trade, has been appointed a member of the city civil service commission by the mayor. Mr. Brennan heads a grain commission firm bearing his name.

Sim Fernandes, of Springfield, Ill., who was recently suspended for 30 days from the Chicago Board of Trade, has been reinstated and has registered his membership for the new partnership of Fernandes & Co. at Springfield.

Henry Simons, the holder of the oldest membership in the Board of Trade, died on Apr. 16, in Mercy Hospital, after a long illness. Mr. Simons, who was 80 years old, was born in England, coming to this city in 1869. He had been a Board of Trade member since 1879.

We are indebted to Sec'y Fred H. Clutton, of the Chicago Board of Trade, for a copy of the 78th annual report of the trade and commerce of Chicago for the year ended Dec. 31, 1935, published by the Board of Trade. In addition to the usual rules and regulations of the board, list of members, officials, etc., the book contains valuable grain statistics, also livestock, butter, cheese, cotton, wool, lumber, etc.

The U. S. Circuit Court of Appeals on Apr. 13 upheld an order of Federal Judge Holly transferring the Rosenbaum Grain Corp.'s lease on the North-Western Elvtr. in South Chicago to the Cargill Grain Co., of Minneapolis, for a consideration of $70,000, holding that the transfer would be "beneficial" to the Rosenbaum estate. The appeal was taken by former officials of the Rosenbaum Corp. Under the lease the Cargill Co. will pay an annual rental of $178,000 to the Chicago & North-Western Railroad, the owner of the 10,000,000-bu. elevator.

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Excavation work started last week on an 800,000-bu. reinforced concrete elevator to augment the storage facilities of Spencer Kellogg & Co. at 22nd and Lumber streets, on the river. The facilities include 16 tanks, 108 feet high, set in a 58x205-foot space, a head house, hopper scale, garner, track shed and receiving sinks, and shipping facilities for both rail and water transport. The new elevator will be a fast handling house, to work in connection with the company's present plant and storage unit. The James Stewart Corp. has the contract.

The Grain Market Analysts Club held its final meeting of the season on Apr. 8, in the Grill in the Board of Trade Bldg. The speakers were B. W. Snow, Nat C. Murray, R. O. Cromwell, H. C. Donovan and Mrs. E. H. Miller, all local crop experts, and J. R. Lloyd, weather forecaster in the Dept. of Agriculture, who was the guest speaker of the evening. An informal round-table discussion on weather and crops was held after the dinner was disposed of. Royal W. Bell was elected president of the club; J. M. R. Glaser, vice-pres.; F. M. Schwandner, re-elected sec'y, and E. A. Boerner, re-elected treas.

INDIANA

Fortville, Ind.—The Fortville Elvtr. Co.'s elevator burned Apr. 15.

Grass Creek, Ind.—Hirsch Bros Grain Co. has installed a new Sidney Feed Mixer and a 5-hp. motor.—L.

McGrawsville, Ind.—Sharp & Overman are building a new warehouse for handling farm machinery.—L.

Knightstown, Ind.—The plant of the Pure Ice & Milling Co. has been sold to Joseph Boyer by R. R. Morgan.

Akron, Ind.—L. L. Regenes, of Claypool, has taken over the Akron Feed Mills here and plans to add to the equipment of the mill.

Albion, Ind.—An unused portion of the east end of the Steifel Grain Co.'s building has been converted into a fine office and showroom.

Clay City, Ind.—Ralph M. Geabes has bot the interest of Louis Schopmeyer in the Geabes Milling Co. here, and is now the sole owner.

Brookville, Ind.—A new flour mill will be erected at this point by L. R. Brumfiel, of Metamora, who has leased the old mill site for that purpose.

Kewanna, Ind.—The Standard Elvtr. Co. has installed a direct-connected, motor driven Blue Streak Hammer Mill with magnetic separator at its local elevator.

South Milford, Ind.—Fred Shroyer has resigned as manager of the Home Grain Co.'s elevator and has been succeeded by Charles Chitester, of LaGrange.

Tipton, Ind.—The safe in the Farm Bureau elevator was broken open two weeks ago. The door was cut off in such a way that a "stink" bomb was not set off.—L.

Rising Sun, Ind.—Edward J. Glass will operate the former City Mills property, recently acquired, under the name of the Glass Roller Mills after remodeling is completed.

Demotte, Ind.—Fire on Apr. 15 destroyed 21 business structures and several residences here, the grain elevator of Albert Konovsky and part of the lumber yard being the only business buildings saved. Loss estimated at approximately $200,000.

Montmorenci, Ind.—The Montmorenci Elvtr. Co. has been reorganized and incorporated; capital stock, 1,000 shares of no par value; directors: Henry W. Marshall, Henry W. Marshall, Jr., and Wilbur R. Owens. Mr. Owens will continue as manager.

Grass Creek, Ind.—Robbers entered the office of Hirsch Bros. Grain Co. and blew the safe, causing minor damage to office. The safe was not even locked. Formerly a sign was hung on the safe reading "not locked," but this has not been done the past year.—L.

Galveston, Ind.—The Bahler Grain & Feed Co. has purchased a new 1½-ton Dodge Truck. It has also installed the new gravity feed Venango Grease Cups on all line shaft and elevator head bearings with very satisfactory results. A new work floor in the elevator has just been completed.

Evansville, Ind.—A suit seeking to recover $26,910 from the Phoenix Flour Mill, subsidiary of Igleheart Bros., of this city, for processing taxes paid under the A. A. A., has been filed in the Vanderburgh County Superior Court here by D. V. Johnson, doing business as the Tennessee Grain Co.—W. B. C.

Bremen, Ind.—The Stauffer Grain Co., of Nappanee, recently purchased from Mrs. Anna Dietrich the elevator known as the Dietrich elevator. The plant has not been in operation for several years. After necessary repairs are made, the plant will be opened and operated in conjunction with the Stauffer Co.'s Nappanee plant.

Rushville, Ind.—The main building of the plant of the Rush County Mills, including the elevator, burned shortly after 8 o'clock Sunday morning, Apr. 5; loss, $50,000; partly insured. Approximately 4,000 bus. of grain was destroyed, principally wheat and corn, with smaller quantities of oats, sunflower seed and buckwheat, and machinery ruined included three new feed and corn grinding units recently installed. The office, which was within a few feet of the burned portion, was saved, also a large warehouse. The day following the fire, plans were already under way to rebuild the burned structure.

Petersburg, Ind.—The Petersburg Milling & Grain Co., operated by Hooker Whitelock and his son Myron, has taken over the Whitelock Milling Co.'s plant and are operating both plants.

Tell City, Ind.—Henry Leimgruber, 69 years old, who for many years was associated with the Tell City Flouring Mills, died at his home here on Apr. 7, his death being due to a complication of diseases.—W. B. C.

IOWA

Garner, Ia.—The Farmers Co-op. Co. will install a 20-ton Howe Truck Scale in its elevator.

Iowa Falls, Ia.—Construction of a corn crib is contemplated by the Farmers Elvtr. Co., managed by C. S. Green.

Rock Rapids, Ia.—A new seed cleaning machine has been installed at the elevator of the Farmers Co-op. Exchange.

Russell, Ia.—A motor-driven hammer mill was recently added to the equipment of the Russell Mill & Produce Co.'s plant.

Milton, Ia.—A feed store has been opened here by Thomas Harmon, who has installed machinery and will do grinding also.

Clarion, Ia.—A new Superior Separator with capacity for 400 bus. per hour will soon be installed in the elevator of Burt Grain Co.

Tennant, Ia.—On Apr. 1 there was a motor burnout in the elevator owned by Mrs. Esther V. Cox with resulting loss of small amount.

Newhall, Ia.—E. E. Beatty, of the Shellsburg Grain & Lbr. Co., bot the O. Keberle elevator here at receiver's sale, on Apr. 13, for $6,650.

Whitten, Ia.—G. D. Mabie of this station has awarded contract to the T. E. Ibberson Co. for remodeling his plant, work to be started at once.

Britt, Ia.—Bruce Lacock has reopened his feed mill closed a year ago last October, previous to which it had been operated for nine years.

Williamsburg, Ia.—The feed business of I. E. Durr & Son has been bot by Clarence Durr, who is moving it about a block from its former location.

Masonville, Ia.—Construction has started on a 20x40-foot frame, iron-clad warehouse for the Masonville Elvtr. (Thos. C. Powell) to house farm machinery.

Dow, Ia.—We have built an iron-clad garage for our tank truck, and expect to paint the elevator this season.—C. L. McAdams, Farmers Grain & Lbr. Co.

Popejoy, Ia.—We will soon build bins to increase our coal storage space, and will increase our lumber storage facilities.—A. E. White, White & Ackerman.

Independence, Ia.—The grain business of the late Edward A. Jamason, whose death was reported in the Feb. 26 Journals, is being liquidated by his widow.

Duncombe, Ia.—The Farmers Co-op. Elvtr. Co., managed by J. J. Claussen, has installed a 20-ton Howe Truck Scale, with 26-foot concrete decked platform.

Sioux City, Ia.—New quarters are being occupied by the Kay Dee Feed Co., feed manufacturers, in the Haskins Terminal Bldg., in the stockyards district.

Matlock, Ia.—The Farmers Elvtr. Co. is installing a feed mixer in its feed house, and a burglar-proof safe in its office. It is also putting a new roof on the engine house.

Clarion, Ia.—A new Strong-Scott Pneumatic Truck lift has been installed in the rebuilt driveway of the south elevator of the Clarion Farmers Elvtr. Co.—J. S. Stewart, mgr.

Marion, Ia.—A new 20-ton, 24-foot Fairbanks Truck Scale with a concrete deck will be installed for the Farmers Elvtr. Co. at this station. The T. E. Ibberson Co. is doing the work.

Ackley, Ia.—The Farmers Co-op. Elvtr. Co. is doing business in the Wade elevator which it bot about a year ago. The company's old 25,000-bu. elevator on the M. & St. L. is now being wrecked and its lumber and machinery are being sold.

Pella, Ia.—Richard Leydens, who has been manager of the elevator of the Farmers Co-op. Exchange here for the last nine years, resigned recently and is opening a feed store on his own account.

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TOTAL STORAGE CAPACITY 10,000,000 BUSHELS

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MILL FEEDS—FEED PRODUCTS—BY-PRODUCTS

Future Orders Solicited

Des Moines, Ia.—The Albaugh Feed Co., jobbers of a full line of farm feeds and hay, at Elkhart, Ia., for the last 12 years, has moved to this city, having leased the building at 408 E. Second St.

Ellsworth, Ia.—Paul Hudgins, who has been employed at the Potgeter elevator at Eagle Grove, Ia., has been promoted to the position of manager of the Potgeter elevator at this point. —Art Torkelson.

Fort Dodge, Ia.—Edw. Glentzer, formerly manager of the Farmers Grain & Coal Co. here, has moved to Cedar Rapids, Ia., where he will manage the Central Iowa Grain Co.'s plant. —Art Torkelson.

Hawkeye, Ia.—The Farmers Elvtr. Co. recently installed a new seed tester in its elevator and is now prepared to give correct germination tests of farm seeds, including grains, grass seeds of all kinds, soybeans and corn.

Des Moines, Ia.—Contract for the construction of eight grain storage bins adjoining its present plant has been given by the Inland Milling Co. to the Jones-Hettelsater Const. Co. The capacity of the bins, which will be 100 feet high, will be 250,000 bus.

Hamburg, Ia.—Carl Reid has purchased the Bentley Grain Co.'s elevator, which he will operate as the Carl Reid Elvtr. Co. Mr. Reid has been associated with his father for some time in the grain business. Mr. Bentley will give his entire time to his farming interests.

Alta, Ia.—The Alta Farmers Elvtr. & Supply Co. recently distributed a 20% dividend among its stockholders of the community. The firm did a large volume of business and showed a nice profit for the year. A 20% dividend was also distributed last year. Edgar Schuelke is manager.

Gilman, Ia.—William H. Beale, 76 years of age, former grain man at this point, passed away at his home in Marshalltown Apr. 12. He had lived in this locality for the past 56 years and for the last two years had been ill. He is survived by two sons and his wife. Burial was at Gilman.—Art Torkelson.

Terril, Ia. —While oiling the elevator chain at the Farmers Elvtr. Co.'s elevator recently, Leonard Pickering became entangled in a shaft and was painfully injured before the power could be shut off. He received a badly bruised leg, forearm, elbow and hand, three broken ribs and cuts on his head and chest.

Minburn, Ia.—Burglars broke into the Farmers Elvtr. Co.'s office recently, blasted the safe and escaped with approximately $300. If they had not been in such a hurry they could have had $140 more if they had opened a purse which they found in the safe and threw on the floor. —Art Torkelson, with Lamson Bros. & Co.

Cedar Falls, Ia.—Cedar Falls Mills is the name under which L. K. Apfel operates the plant formerly run by the Brown-Fallgatter Co., Inc., which he bot last January. Mr. Apfel is the active manager and is rapidly making mechanical improvements for the production of feeds, principally. Two motors, a drag and an ear corn crusher are slated for immediate installation.

In addition to the grain men mentioned in the Journals last number as having been recently elected to city or town offices, the following were elected as councilmen in their respective towns: Otto Zierke, manager of the Rockwell City Elvtr. Co., Rockwell City; J. J. Delamore, manager of the Farmers Elvtr. Co., Clare, and A. P. Reuble, manager of the Barnum Elvtr. Co., Barnum.—Art Torkelson.

Imogene, Ia.—Howard M. Holmes' elevator (also known locally as the old J. L. Gwynn elevator), leased by Tom Connors, burned shortly after noon on April 7, together with about 1,500 bus. of grain; loss, estimated at approximately $6,000; covered by insurance. The elevator was erected in 1880, and was the second building in town to be constructed. Mr. Connors operates the only other elevator in town and will continue his business there.

Fort Dodge, Ia.—Plans for a soybean plant here, made by the late L. E. Armstrong before his death, will be carried out without change, it was decided by directors of the Plymouth Clay Products Co., which will operate the plant as the Plymouth Processing Mills. Machinery for the plant has been delivered and installation is being rushed so that the plant may open May 1. The company expects to process about 1,000 bus. of soybeans every 24 hours.

Sioux City, Ia.—Lamson Bros. & Co. have moved their local office from the Warnock Bldg. to the Frances Bldg.

Modale, Ia.—The Supreme Court of Iowa has affirmed the decision of the Harrison County district court dismissing E. E. McFerrin's suit to set aside a sale of a grain elevator under foreclosure. The house was sold to satisfy a judgment of the Nye & Jenks Grain Co. for $6,509, and was bid in by the Nye & Jenks Co. for $7,222, who later sold the elevator to the Modale Farmers Elvtr. Co. for $8,000 payable in $1,000 installments annually, subject to a second mortgage of $4,000.

Killduff, Ia.—Regarding the new elevator which the Fleck Elvtr. Co. will build to replace its fire loss of last November, R. C. Fleck writes: "Plans call for an 11,000-bu. cribbed house, iron clad, with pit sheller, cleaner, scale, overhead truck lift and manlift; a mill house equipped with a 22-inch Munson Attrition Mill, corn cracker, grader and cleaner, oat huller and one-ton mixer, and feed storage for 150 tons." The Ames Const. Co., which has the contract, will start building May 1.

Paullina, Ia.—O. F. Long, known among his friends as "Shorty," died from pneumonia, Apr. 11, after a short illness. Mr. Long has been at Paullina since 1920, after his discharge from the army of the World War and has been one of the very prominent shippers of grain during that time, contributing much to the importance of Paullina as a grain market and to a wide surrounding territory. Laurence Long, remaining partner of the firm of Long Bros., is thus left with the responsibilities of the business.—C. E. Lowry, with James E. Bennett & Co.

Fifty-seven grain elevators in Iowa, Minnesota and South Dakota would be left without railroad facilities under the dismemberment program proposed for the Minneapolis & St. Louis Railroad, according to a statement credited to Congressman Guy M. Gillette, of Iowa, who is a member of a voluntary com'ite in Washington which is lending its support to a fight against the sale plan of the Associated Railways Co., under which the M. & St. L. would be parceled out among eight competing carriers and more than 500 miles of its trackage abandoned. Of these 57 elevators, 24 are in Iowa, 28 in South Dakota and 5 in Minnesota.

Clear Lake, Ia.—The Farmers Co-op. Co. has given the contract for the erection of a new feed mill building and installation of equipment to the T. E. Ibberson Co. The plant will have two legs and a pneumatic blower system will be used for servicing the feed mill, which is an attrition mill with two 40-h.p. motors. There will be 10 bins and a special driveway for service to and from the plant. The main elevator will be connected up to this feed mill by cross spouting. The whole building will be iron clad. John V. Bohning, manager of the Farmers Co., writes: "We are making improvements, changes and additions costing between $6,500 and $7,000. Mill will be removed to warehouse; Strong-Scott Batch Mixer, crushers, crackers, scalpers, cracked corn graders, and hopper scales installed; a blower system for delivering products to top of building will be fitted with three-way valve, which will deliver to sacks on work floor, to the mixer and to bulk bins; a dust collector will be installed and the mill connected to blower. The feed processing room will be in the warehouse and all white enameled and enclosed. This will be an up-to-date mixing plant."

KANSAS

Mayfield, Kan.—The Hunter Milling Co.'s plant was damaged by wind Mar. 26.

Portis, Kan.—The Scott Dillen Estate elevator has replaced its shingle roof with metal.

McDonald, Kan.—At present I am handling farm machinery, but I am planning to start a feed business.—Francis S. Miller.

Beattie, Kan.—The Farmers Union Co-op. Ass'n contemplates installing a filling station in connection with its elevator property.

McCune, Kan.—R. D. Baker, manager of the Farmers Union elevator here for the past 18 years, resigned recently, effective Apr. 15. George Garrison has succeeded him.

Salina, Kan.—The elevator of the Western Star Mill was discovered to be on fire at 8:30 a. m., Mar. 30, due to friction, but the blaze was extinguished with only nominal damage.

LOWELL HOIT & CO.—Grain Receivers and Shippers—none better. In its terminal and country offices there is a spirit of optimism, courage and helpfulness. And it wants every shipper to feel when he sees the name that there is one—dependable—experienced—and—thoroughly reliable—concern giving all its time and attention to the handling of grain, and to the general welfare of its customers.

Dwight, Kan.—Carl A. E. Johnson sustained slight damage to his elevator's electrical equipment on Mar. 10.

Nortonville, Kan.—Improvements just made at the Corpstein elevator include the installation of an electric truck dump, strengthening the floor of the driveway and rebuilding the grain handling machinery.

Kansas City, Kan.—Russell May, operator of the Grandview Feed Mills, at Grandview, Mo., plans establishing a feed mill and store here. Mr. May recently bot a 144x120-foot tract adjoining the Kansas City Stock Yards.

Hutchinson, Kan.—Lease of 1,000,000 bus. of terminal space in the 2,000,000-bu. Gano elevator here, effective June 15, has been given to the Farmers National Grain Corp. The corporation's local office is in charge of J. R. Marts.

Hutchinson, Kan.—At the recent annual election of the Kansas Co-op. Grain Dealers Ass'n, held in this city, the following officers were chosen: Pres., A. C. Keller, Minneola; vice-pres., F. J. Habiger, Bushton; sec'y, W. O. Sand, Hutchinson (re-elected).

Kansas City, Kan.—The State Supreme Court has upheld the validity of acts of the city in negotiating with the Federal Government for funds to finance the erection of the proposed 3,000,000-bu. elevator on the levee here, and it is reported that preliminary construction may get under way by May 15.

Kingman, Kan.—In addition to the new concrete headhouse and storage unit under construction for the Consolidated Flour Mills Co. (as reported in the Mar. 11 Journals) by Chalmers & Borton, a wheat cleaning plant is being erected, to be of brick construction, four stories high, also a brick feed and flour warehouse.

Newton, Kan.—G. Murray Ross, of Ottawa; Paul Ross and L. E. Zimmerman, of Whitewater, and J. D. Zimmerman, of Sterling, have bot the majority interest in the Goerz Flour Mills Co., which operates a 1,500-barrel flour mill and large grain storage and warehouse facilities here, from J. J. Vanier and associates, of Salina.

KENTUCKY

Augusta, Ky.—Charles Edwards has installed a new hammer mill in his feed mill.

South Carrollton, Ky.—Green River Milling Co. recently sustained wind damage to its plant.

Cynthiana, Ky.—Edward Gossett has bot the Crescent Milling Co., which has been in the hands of a receiver.

Central City, Ky.—Underwood Bros. have moved their feed mill to new quarters on West Front St. They manufacture horse and cattle feed, laying mash and other poultry feed.

Martin, Ky.—One of the last water mills in this section, the 125-year old mill here, known thruout the county as the Alex Crisp Mill because Alex Crisp operated it for nearly a half century, is to be taken down soon and the dam removed.

Barbourville, Ky.—William Johnson, 50, a farmer succumbed to injuries received when a boiler exploded in a grist mill operated by Mat Frederick near Emanuel. Johnson suffered internal injuries and burns. Frederick's 12-year-old son was severely burned about the legs.—A. W. W

MICHIGAN

Byron, Mich.—Central Elvtr. Co.'s elevator on Mar. 27 was damaged by wind.

Caro, Mich.—Caro Farmers Co-op. Elvtr. Co. recently sustained wind damage to its elevator.

Rockford, Mich.—The old Seth Porter Grist Mill on Stegman Creek burned early this month; loss, $4,000.

Holland, Mich.—The plant of the Standard Grocer & Milling Co. will be remodelled at a cost of $7,000. The upper stories will be dismantled and two additions, 75x126 and 30x60, will be built.

Lowell, Mich.—C. H. Runciman, who operates a large grain and bean elevator here and who is a former president of the Michigan Bean Shippers Ass'n, has been appointed by the governor as a member of the state emergency relief commission.

Pinconning, Mich.—Two local elevators were entered by thieves during the last week of March. At the Frutchey Bean Co.'s elevator 50 cents and the keys were stolen, and at the Farm Buro elevator $1 in stamps and also the keys to the building were taken.

MINNESOTA

Kenyon, Minn.—The Kenyon Farmers Merc. & Elvtr. Co. plans to construct this summer a two-story brick and tile 55x57 foot building for its machine department.

Madelia, Minn.—Repairs are being made at the Lickfield Grain Elvtr. here, the T. E. Ibberson Co. doing the work. A new leg, head drives and motor equipment are part of this work.

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Mahnomen, Minn.—The Independent Elvtr. Co. has installed machinery for the treatment of farmers' seed grain.

Sleepy Eye, Minn.—The Snow Hatchery recently installed a one-ton horizontal revolving drum batch mixer, manufactured by R. R. Howell & Co.

Zumbro Falls, Minn.—A new feed grinding plant has been installed by Fred J. Kreitt, new owner of the Farmers Elvtr. here, including an attrition mill and a corn and cob crusher.

Paynesville, Minn.—The Leonard Garding Elvtr. Co. has awarded contract to the T. E. Ibberson Co. for rebuilding the driveways and installing a 20-ton, 26-foot dump scale along with air dumps.

Hazel Run, Minn.—The seed cleaning facilities of the Hazel Run Produce Co. are being improved by the addition of a large motor-driven cleaner. The order was placed with R. R. Howell & Co.

Benson, Minn.—The Benson Marketing Co. is wrecking its old elevator and replacing it with a modern 54,000-bu. cribbed, steel-clad house equipped with two legs with Winter Drives, a 20-ton Fairbanks Scale, Winter Truck Lift and a 10-bu. Richardson Automatic Scale. The Hogenson Const. Co. has the contract.

Blue Earth, Minn.—J. A. Johnson, manager of the Blue Earth Farmers Elvtr. Co.'s elevator since last June, has resigned and taken a position with a grain commission firm as agent in southern Minnesota and northern Iowa. He will continue his residence here, working from Blue Earth. He has been succeeded at the local elevator by Theo. P. Long, of Frost.

Moorhead, Minn.—The new corn drying unit, built at this city for the Moorhead Farmers Elvtr. Co. (whose plant was damaged by fire in December), was completed early this month. The T. E. Ibberson Co. did the work. In addition to the corn drying unit a large seed elevator was built for processing corn and barley. The plant is now in operation.

Orleans, Minn.—The Orleans Grain Co. recently appointed Harold A. Rystad manager of its two elevators here. It is believed that Mr. Rystad, who is only 21 years of age, has the distinction of being the youngest man to hold such a position. He got his training in the grain business by working with his father, A. H. Rystad, who is the manager of the local farmers' elevator at Fisher, Minn.

Cannon Falls, Minn.—The Farmers Elvtr. Co. at this station has awarded contract to the T. E. Ibberson Co. for the erection of a new elevator to replace the present old structure which has been in service for the past 60 years. The old plant will be completely wrecked to make way for the new structure. New office buildings will be built. A new elevator having 20 bins and three legs will be erected. A number of cleaners will be installed on the work floor. Carter Cleaners will be used. An automatic scale will be used for shipping purposes, and a Fairbanks Scale will be used in the driveway for receiving the grain. A full basement will be provided under the building, and the whole structure will be covered with galvanized iron.

DULUTH LETTER

At Ft. William and Port Arthur, Canada, the ice breaking tug Whalen has started breaking its way thru an 18-mile field of 28-inch ice before a channel can be opened to free water.—F. G. C.

Duluth, Minn.—The location of the protein laboratory of the state grain inspection department will not be changed at present, as had been planned. A two-year lease has been taken on the quarters at 330 W. First St.

The uplift and high premiums have not brot any big run of grain receipts to this market. Receipts have shown slight improvement off and on but on the whole have been just fair and under expectations. Other markets outbid local buyers and so long as this condition exists there can be no prospects for betterment. Possibly there might be a turn after navigation opens and seeding operations are over.—F. G. C.

Fairly steady and active shipping instructions were maintained in car loading and movement to outside consumptive points in the way of wheat, oats and barley. Owners continue to draw on local stocks, when track arrivals and offerings are insufficient to cover current wants. Small amounts of Canadian wheat held in bond is being released on payment of duty and shipped to outside milling points.—F. G. C.

A very ligth demand was reported for grain to be shipped out of Duluth in the immediate opening. Vesselmen advised a little oats has been chartered and dabs of wheat for eastern milling account have been contracted. The opening rate on wheat, Buffalo delivery, was 2¼ cents. Eastern demand for grain is slow, but vesselmen hope to see demand for boat space pick up once navigation opens and movement gets under way for the season. Elevators at Duluth-Superior on Apr. 18, held 18,634,000 bus. of all kinds of grain as against 10,332,000 bus. a year ago. Wheat and oats comprise the bulk of the stocks, barley and rye ranking next in order.—F. G. C.

Aside from a few mild days, winter still holds Lake Superior in its icy grip, thereby giving rise to the fear among marine men and shippers that the navigation season will be fortunate to get under way in the next two to three weeks. Ice on the Duluth side of the harbor has been broken up and blown over towards the center, giving quite an open space. The Wisconsin side of the harbor remains icebound. Out in front of the Duluth canal entrance to the harbor there is an open stretch of narrow water, extending for at least a half mile. Out in the lake a heavy-packed ice field extends beyond vision from shore to shore. It is continuous from Duluth to Two Harbors, about 20 miles down the lake.—F. G. C.

MINNEAPOLIS LETTER

William B. MacLean, a veteran Minneapolis grain man, died at his home in this city, on Apr. 6, at the age of 73 years.

A membership in the Chamber of Commerce has been purchased by Walter Foster, who will represent the Mullin-Dillon Co. on the floor. He was formerly with the Atwood-Larson Co. in its local office.

New officers of the Minneapolis Grain Shippers Ass'n are: Otto F. Bast, president; W. L. Walter, vice-president, and James A. Gould, sec'y-treas. (re-elected). M. R. Walsh and H. C. Fisher were elected members of the executive com'ite.

The Supreme Court of Minnesota has affirmed an order of the State Industrial Commission denying compensation to Clara Anderson, widow of Adolph M. Anderson, for 29 years an employe of the Russell-Miller Milling Co. and who died of hydrocyanic acid poisoning. Anderson entered the mill to begin work in the morning, disregarding printed placards warning all to keep out, and pushing past the watchman who tried to bar him.

MISSOURI

Macon, Mo.—Following a long illness, Charley Burkhart, owner and operator of the Macon Elvtr. for many years, died recently.

Salisbury, Mo.—Three creditors of the Model Mill here have filed a petition in court asking that the concern be declared a bankrupt.

Gower, Mo.—The Dannen Grain & Milling Co., of St. Joseph, has leased the Gower elevator and is now operating it, with Donald Hull, former proprietor, as manager.

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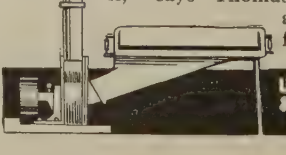

U. S. WIND ENGINE & PUMP COMPANY
BATAVIA, ILLINOIS

Jefferson City, Mo.—The Missouri Grain Dealers & Millers Ass'n will hold its annual convention in this city, at the Missouri Hotel, on June 18. A good program is being prepared.

Kingsville, Mo.—The recent fire loss on the elevator of J. W. Howard, P. F. Reidy and Jack Hobbs was estimated at $4,000, including feed valued at $1,500 and several hundred bus. of corn; partly covered by insurance. Nothing was saved.

Windsor, Mo.—L. W. Lingle, owner and manager of the Lingle Grain & Milling Co., has solved his grain transportation problem by operating his own fleet of trucks. He has six trucks that operate within a radius of 40 miles of his feed manufacturing plant.

Kansas City, Mo.—Charles M. Woodward was found dead in his home recently, having taken his own life by shooting himself. Mr. Woodward, who was a grain broker with offices in the Board of Trade Bldg., this city, was at one time owner of the Western Grain Co., which years ago operated the Dixie Elvtr. here.

Kansas City, Mo.—A new plant will be erected here by the Consoliated Products Co., manufacturers of dried buttermilk, on a tract of land recently purchased in the industrial district. It will be 60x90 feet and part of it will be two stories high. Other plants recently completed by the company are located at Springfield, Mo., and at Hutchinson, Kan.

MONTANA

Great Falls, Mont.—The Montana Flour Mills Co. sustained damage to its electrical equipment amounting to several hundred dollars recently.

Lewistown, Mont.—A new track conveyor was installed and pits remodeled recently at the Farmers Elvtr. Co.'s elevator by the Victor Const. Co.

Sidney, Mont.—The Farmers Elvtr. Co. plans immediate construction of a new and up-to-date elevator on the site of the house that burned Mar. 9, as previously reported in the Journals. The house will be equipped with the latest elevator machinery.

Coffee Creek, Mont.—The Montana Elvtr. Co. is installing smut treaters in its elevator here and at Stanford, Mont., and is having its dump scales changed and rebuilt in its elevators at Ryegate, Shawmut and Moore, Mont., the Victor Const. Co. doing the work at all of these points.

NEBRASKA

Holmesville, Neb.—William Steinmeyer recently purchased the Farmers Elvtr. Co.'s elevator here.

Falls City, Neb.—Installation of machinery for manufacturing corn flakes and toasted wheat bran is under consideration by the Falls City Milling Co.

Schuyler, Neb.—The Howell Milling Co. of Howell, Neb., has definitely decided to move its plant to Schuyler, where it expects to have it ready to operate by July.

Cheney, Neb.—The Farmers Elvtr. Co., of Omaha, is having a new extension built on its elevator driveway at this station and an air truck lift installed. Van Ness Const. Co. is doing the work

Brandon, Neb.—M. T. Frederick, for the last three years manager of the Farmers Co-op. Co.'s elevator here, resigned recently and has moved his family to Holyoke, Colo., where he has a similar position.

Silver Creek Neb.—Cleon Dech, manager of the Farmers Elvtr. Co.'s elevator here for the past seven years, filed for the Republican nomination for U. S. senator from Nebraska, to be voted on at the recent election.

Richland, Neb.—The Farmers Union Co-op. Ass'n is having the W. H. Cramer Const. Co. install a 30x10-foot, 20-ton Fairbanks Truck Scale with concrete deck at its new office, which was originally a bank building.

Liberty, Neb.—The Liberty Grain Co. at this point is having a general overhaul job done on its elevator in preparation for the new crop. The foundations are being repaired, manlift and other equipment are being straightened, a new leg belt will be installed and the elevator is to be painted. The Van Ness Const. Co. is doing the work.

Omaha, Neb.—A 500-h. p. electric motor was recently installed in the plant of the Maney Milling Co.

Wood River, Neb.—The sale of the Wood River Co-op. Grain Co.'s elevator to Gus Holling for $2,500 (reported in the Mar. 25 Journals) was not confirmed by the court, as stockholders in the grain company objected on the grounds that the price was inadequate. At a later hearing Dan Wiseman offered $3,000 for the plant, he and Holling continuing to try to outbid each other until Wiseman's bid of $3,625 ended the contest. Upon payment of the full amount (within 30 days), the judge will confirm the sale.

NEW ENGLAND

Lowell, Mass.—A shipment of cattle feed valued at $15,000, was seized by federal officials of the Pure Food & Drug Division a few days ago, who alleged it was unfit for food for animals. The officials said the feed, while in freight cars, was under water at Brattleboro, Vt., during the recent floods. An agent of a Lowell grain mill bot the feed and it was shipped from Vermont, putting it in the class of interstate commerce. Plans are under way to use the feed for fertilizer to avoid making it a complete loss.—L. V. S.

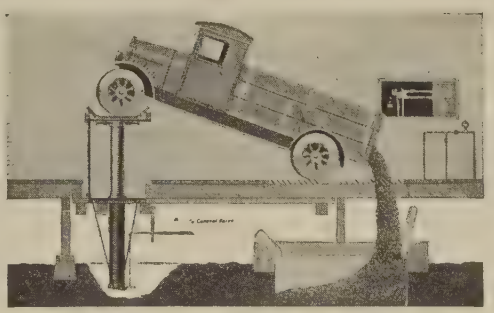
Lebanon, N. H.—Clayton Berry, grain merchant of Norwich, Vt., has bot Arthur H. Hill's grain business here and has taken over active management. Mr. Hill is retiring after 43 years in the wholesle and retail grain business and milling flour and feed.

Clinton, Mass.—The American Cereal Food Process Co. has arranged to purchase the old Cameron Street Mill, a five-story brick structure containing 66,000 square feet of manufacturing space, and a large wooden frame building and ten acres of land adjoining the property. The firm is to manufacture cereals, employing 150 persons, within three months, officials announced.—L. V. S.

BOSTON LETTER

From Buenos Aires came 220 bags of corn and 800 bags of wheat feed flour on the steamer East Indian, arriving a few days ago.—L. V. S.

The STRONG-SCOTT Pneumatic DUMP



is the only vertical lift dump that suspends from the scale timbers. Result: *No interference with correct weighing.* Lower installation cost. Many other important features make this the greatest dump value obtainable. Write for particulars.

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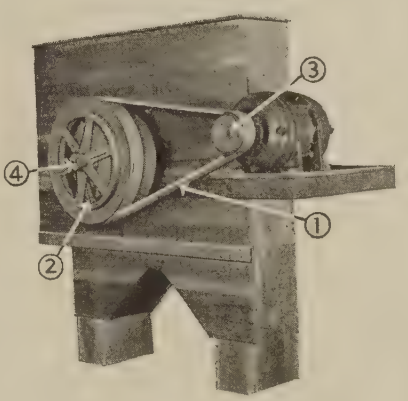

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STRONG SCOTT MINNEAPOLIS

Malt continues to flow to Boston from foreign countries. Recent shipments include 800 bags on the steamer Black Osprey from Antwerp; 433 bags on the Wasgenwald from Hamburg, and 2,633 bags on the Carplaka from Gdynia, Poland.—L. V. S.

Grain, feed and flour men were reassured by Dr. O. M. W. Sprague, former advisor to the Bank of England, and former assistant Sec'y of the Treasury, that inflation does not appear imminent, when he addressed the Boston Grain & Flour Exchange, at its April luncheon-meeting.—L. V. S.

Charlestown, Mass.—The first suit filed in Massachusetts to recover processing taxes is that of B. Rothstein & Co. against the Pillsbury Flour Mills, which has a local branch unit. The suit was filed in the United States District Court for $18,748, claimed as being due the plaintiff. The bill alleges that the company bot 13,658 barrels of flour from May 1, 1935, to Jan. 6, 1936, from the Pillsbury Co. at prices including $1.38 a barrel for tax. The bill alleges that such money was held in escrow or was retained by the Pillsbury Co., awaiting decision of the Supreme Court.—L. V. S.

NEW MEXICO

Taos, N. M.—The Taos County Non-Profit Co-op. Flour Mill, incorporated; directors of the company are: J. P. Rael, Sam Young, J. P. Barela, Marcelino Martinez, W. P. Cater, Candido Almendares and Jose E. Trujillo.

NEW YORK

Salem, N. Y.—The mill building and additions owned by William J. Chambers were destroyed by fire on Mar. 26.

New York, N. Y.—The general and executive offices of the Hecker H-O Co. have been moved from Buffalo to this city, where the address is 88 Lexington Ave.

Albion, N. Y.—Alfred W. Woods, who has been connected with the feed and flour milling business in this state for 60 years, being president of Woods & Sprague Milling Co., died in this city at the Arnold Gregory Hospital, Mar. 10, at the age of 78 years.

New York, N. Y.—New members of the Produce Exchange are Charles F. Kronheimer and Rodolphe-Edmond Rufenacht, both of Havre, France. New associate members are Samuel E. Worms and Frederick S. Abel, both of New York City, and Harry S. Henry, of Paris, France.

New York, N. Y.—Following is the personnel of the nominating com'ite recently appointed to name the officers and directors to be voted on by members of the Produce Exchange on June 1: Winchester Noyes, chairman; Wallace Brindley, Charles B. Crofton, James Eblen, John F. Gerard, Milton Goldfogle, A. L. Hodder, Frank A. Hoey and L. G. Leverich.

NORTH DAKOTA

Hoople, N. D.—Operation of a filling station and bulk oil plant has been started by the Farmers Grain Co.

Antler, N. D.—The Antler Co-op. Grain Co. has purchased two elevators here from the National-Atlas Elvtr. Co.

Gladstone, N. D.—Stock of the Farmers Union Elvtr. Co. stored at this location was destroyed by fire on Apr. 1.

Castleton, N. D.—New iron roofs are being installed at the Castleton Elvtr. Co.'s elevator. The T. E. Ibberson Co. is doing the work.

MICHIGAN
POULTRY WHEAT
RED, WHITE AND MIXED
MILLING WHEAT
ROSEN RYE
MALTING BARLEY
NATURAL PLUMP OATS
BUCKWHEAT
Ask for Samples and delivered prices
LANSING GRAIN CO., Lansing, Mich.

Bowman, N. D.—The Farmers Union, of Buffalo, is planning to build a 40,000-bu. grain elevator at this point. Ray Patterson is drawing plans for the building.

Garrison, N. D.—The Occident Elvtr. Co. is adding bulk gas and oil, also a feed grinding mill to its service, the two buildings to cost $10,000. Construction is under way.

Donnybrook, N. D.—The Farmers National Grain Corp. has temporarily closed its grain house at this point. The Northland Elvtr. Co. took over the grain and storage tickets held by the Farmers National.

Williston, N. D.—A. E. McCullock, manager of the Farmers Union terminal elevator here, has resigned and taken the position of supervisor of the new feed mill unit at the Farmers Union Co-op. poultry and produce plant.

Grand Forks, N. D.—The local offices of the Benson-Quinn Co., grain brokerage firm, have been moved from the State Mill & Elvtr., where they have been located for the past 13 years, to the Security Bldg. A new quotation machine has been installed.

Hamer, N. D.—The Hamer Co-op. Elvtr. Co. is having the T. E. Ibberson Co. remodel its elevator. A new cupola is being built, new iron roofs are being installed and complete new legs. Equipment includes all new roller bearings. A new manlift is being installed. The building will be painted and general repairs made.

Hazelton, N. D.—The Occident Elvtr. Co. has started construction of its 35,000-bus. cribbed, steel clad elevator to replace the one destroyed by fire in January. The house will have two legs driven by Fairbanks-Morse enclosed fan-cooled motors thru Strong-Scott Head Drives. A Gerber Double Distributor will spout the grain to 14 bins. A Strong-Scott Air Dump will dump grain thru a 20-ton Fairbanks Scale and a 100-bu. Fairbanks Hopper Scale will be used for shipping. A Carter Mayhew Cleaner will be installed. The Hogenson Construction Co. has the contract.

Williston, N. D.—The new feed mill unit of the Farmers Union Co-op. Ass'n (which purchased the large International Warehouse and is operating a chicken hatchery in connection with it), contract for which was awarded to the T. E. Ibberson Co., as reported in the last number of the Journals, will be a combination feed mill and elevator. The plant will be fitted with 10 bins, all overhead storage, and have a driveway with a 15-ton receiving scale and air dumps. A full basement will be provided under the building and the whole structure will be iron clad. This building will set about 100 feet from the warehouse. The equipment will consist of a Strong-Scott Attrition Mill, with a pneumatic system. Two legs will be provided. The motors thruout this plant will be Fairbanks-Morse type and all equipment will be roller bearing. There will be a 2,000-pound batch mixer installed for mixing purposes. A combination corn cracker and grader with a blower system will be located on the work floor. The trackage to this plant will be a new track installed by the Great Northern Railroad. Work has already been started on the buildings.

OHIO

Wren, O.—C. E. Chronister has had a Sidney Kwik-Mix Feed Mixer installed in his feed mill.

Elyria, O.—Red Mill, incorporated; to sell mill products; incorporators: J. W. Dilgren and Samuel Deutsch.

Troy, O.—Stockholders of the Allen & Wheeler Co., elevator operators, in business here since 1848, recently voted to dissolve the business.

Cridersville, O.—Reichelderfer & Graham have recently installed in their elevator a new Ajacs Hammer Mill furnished by the Sidney Grain Mchy. Co.

Dowling, O.—The elevator of the Sugar Ridge Grain Ass'n burned Apr. 4; loss, $20,000. The fire was discovered in the top of the elevator about an hour after it had been closed for the week end. The elevator contained about five cars of grain, which was destroyed. Some of the merchandise was saved.

Zanesville, O.—The Holbein Implement & Supply Co. has taken over the business of the City Hay & Grain Co., operated for several years past by Mrs. H. R. McDonald, and will continue it, adding implements and fertilizers, under the name of the Holbein Supply Co. Mr. Holbein will continue in the cacapity of manager.

Bellevue, O.—The Wise Grain Co. has succeeded the Buckingham Milling Co., an old, established business here.

Pemberville, O.—The Pemberville Elvtr. Co. has awarded the contract for the erection of a concrete elevator and grinding mill to the A. Clemans Const. Co.

Sidney, O.—One of the most widely known grain dealers in this section 20 years ago recently passed away. William H. Persinger, manager of the carlot business of the J. E. Wells Co., of this city, from 1898 to 1918, died of a heart ailment at his home here on Apr. 7, at the age of 62 years. Since his retirement from active business Mr. Persinger retained his interests in several country elevators in this territory. He devoted much of his time in late years to the aid of unfortunate children and those afflicted with tuberculosis, serving commendably for a long period on the board of trustees of the Tuberculosis Hospital in Lima, O., and also the board of trustees of the Shelby County Children's Home. His widow, one daughter and three grandsons survive.—J. C. Custenborder.

OKLAHOMA

Mulhall, Okla.—C. B. Martin has bot the elevator here from the Ponca City Milling Co.

Wakita, Okla.—We will put a new roof on our elevator this spring and new floors thruout.—Alva Roller Mills of Kansas Flour Mills Corp., G. S. Purdy, mgr.

Enid, Okla.—The mill and storage bins of the Geis Mills burned early in the morning of Apr. 16; loss, over $30,000. The warehouse and feed bins were damaged but not destroyed.

Camargo, Okla.—Stockholders of the Farmers Co-op. Elvtr. Ass'n of Camargo recently voted to liquidate. The ass'n was formed about two years ago and operated an elevator here.

Welch, Okla.—Earl Russell, grain elevator operator, died from pneumonia in a Vinita hospital on Apr. 3, at the age of 43 years. Early this year he leased the John Schenk elevator here.

Yukon, Okla.—The Yukon Mill & Grain Co. recently installed new 10x34-foot scales, having a capacity of 20 tons. The new scales are 18 feet longer than the ones that were removed.

El Reno, Okla.—The Canadian Mill & Elvtr. Co.'s new mill, previously reported in the Journals as under construction, is nearing completion and is expected to be ready for operation by June 1.

Pawhuska, Okla.—The Oklahoma Cereal mills opened here last month. Eben Soderstrom, manager, operated an elevator and flour mill in this city for a number of years. Feed will be manufactured, also.

Hollis, Okla.—The Hollis Flour Mill is spending $3,500 in new equipment, which will double its present output. In addition to meal and flour, the company manufactures various lines of livestock, dairy and poultry feeds.

Official Brown-Duvel
MOISTURE TESTERS
and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.
HARRY B. OLSON
ASHLAND BLOCK CHICAGO, ILL.

ELLIS DRIERS
Known the world over for reliability and perfection of product. Direct Heat — Indirect Heat — And Steam Heat. Also . . .
A complete line of Rotary Driers and Feeders for mill and feed plants.
The Ellis Drier Co,
2444-56 N. Crawford Ave. Chicago, Ill., U. S. A.

Perry, Okla.—Operation of the milling department of the Perry Mill & Elvtr. Co. (owned by General Mills, Inc.) has been closed temporarily. The company will continue to operate the elevator and ice plant, which have been in operation for many years in connection with the mill.

Chelsea, Okla.—Frederic R. Calkins, Jr., head of the Stewart-Calkins Co., grain and hay, died a few weeks ago from pneumonia, at the age of 39 years. Mr. Calkins bot an interest in the Stewart Hay & Grain Co. here in 1933, and upon the death of Mr. Stewart two years ago he became the active head of the company, which he continued to operate as the Stewart-Calkins Co.

Clyde, Okla.—A new 60,000-bu. cribbed construction, iron-clad elevator will be built for the Clyde Co-op. Ass'n at this point by the Van Ness Const. Co. The new elevator, which is to be 29x48, 90 feet high, will have 15 bins, all hopper bottomed. An old, small elevator is being wrecked to make room for the new structure. Work is already under way and the new building is to be completed by June 1.

PACIFIC NORTHWEST

Buhl, Ida.—The Buhl Milling Co. recently completed the erection of a 50-barrel flour mill here.

Delaney, Wash. — Columbia County Grain Growers, Inc., sustained windstorm damage recently.

Silverton, Ore.—It is possible that the Fischer Flouring Mills Co. may re-open its flour and cereal mill here, closed for several years past.

Longview, Wash.—Construction of a one-story reinforced concrete building, 50x120 feet in size, was started last month for the Campbell Feed Co.

Portland, Ore.—The manufacture of flour and cereals will be discontinued at the local plant of Kerr Gifford & Co., it is reported, on account of the lack of export business. The company will continue in the grain and feed business, however.

Oakland, Ore.—The Douglas County Mills, of Roseburg, Ore., is erecting a concrete and steel building, 30x60 feet, to house a branch of its Roseburg business. Mixing of feeds will be featured, in addition to a full line of feeds and flour. John Edwards will be local manager.

Spokane, Wash.—An office has been opened in the Peyton Bldg., this city, for purchasing wheat for the Pillsbury Flour Mills Co. Donald B. Long, formerly with the Minneapolis mills of the company, is local manager. This is the company's first office in this state. A mill is operated at Astoria, Ore, and offices are maintained at Portland, Ore.

PENNSYLVANIA

Chambersburg, Pa.—The feed and flour mill operated by C. E. Spitzer, and known locally as Boyer's Mill, burned Apr. 1; loss, about $5,000.

Ward, Pa.—The warehouse of Richards & Schrader, feed and farm implement dealers, burned recently; loss, $45,000, including a quantity of feed and other merchandise. Rebuilding is planned.

Philadelphia, Pa.—Among recent applicants for membership in the Philadelphia Commercial Exchange was Walter K. Woolman, Jr., of the Tidewater Grain Co., who is the son of Walter K. Woolman, president of the exchange 13 years ago, and grandson of Samuel C. Woolman, president in the late '90's.

Washington, Pa.—The West Penn Feed & Milling Co., of West Brownsville, has bot the entire stock and equipment of John B. Spriggs & Sons from the latter's receivers. The Spriggs Co. was established 67 years ago. The new owners are operating the business under the name of the West Penn Feed & Grocery Co.

SOUTH DAKOTA

Mission Hill, S. D.—The Farmers Union Co-op. Ass'n. is going to replace its No. 3 hammer mill with a No. 4, which will necessitate the installation of a 75-h.p. motor.

Turton, S. D.—The manager of the Farmers Elvtr. Co.'s elevator, H. O. Ewing, was laid up recently for four weeks with a broken arm, caused by slipping on the ice near the elevator.

Zell, S. D.—Farmers Elvtr. Co., incorporated; capital stock, $30,000; incorporators: William Brueggemann, Charles E. Harr, John Harder, Bernard R. Spiegel, W. H. Preston, V. E. Schmidt and George Anderson.

Glenham, S. D.—A bulk gasoline and oil plant has been taken over by the Glenham Equity Exchange, which will operate it on a co-operative basis but will not do a retail business. Lloyd S. Engebretson, manager of the elevator, will also have charge of this new business.

Rapid City, S. D.—Work has started on the new elevator for the McMahon Co., described in detail in the Feb. 26 Journals, and for which the T. E. Ibberson Co. has the contract. This is a large processing plant for the storage and cleaning of seeds, and elevator facilities have been added for buying grain locally. It has been decided while the elevator is under construction to build a large warehouse, with about 4,000 feet of capacity to accommodate the storage of sacked products, adjacent to the elevator.

SOUTHEAST

Salem, Va.—Moore Milling Co., incorporated; capital stock, $60,000.

Norfolk, Va.—The Berkley Feed Co. is erecting a brick warehouse.

Richmond, Va.—The National Oats Co., an Illinois corporation, has been granted authority to deal in cereals in this state. A. D. Jackson is in charge.

Atlanta, Ga.—The Royal Flour Co. has opened a subsidiary plant in this city under the name of the Georgia Flour Co. The mill has a capacity of 400 barrels a day.

McKendree, W. Va.—Three persons were killed and five injured in the explosion of a grist mill boiler near here, on April 18. Four were so badly scalded that they may die.

Herndon, Va.—The feed mill of the Herndon Milling Co. was one of the four buildings burned here recently, with a loss totalling about $75,000. The fire started in the feed mill, a gasoline torch, with which the engineer was attempting to start a gas-burning engine, exploded and the frame structure was soon in flames.

TEXAS

Temple, Tex.—A warehouse owned by the Wendland Grain Co. and containing 20,000 bales of corn shucks burned late in March; loss, $3,000; partly insured.

Waxahachie, Tex.—The old firm of Shive & Keys that has been in operation for 28 years has been bot by W. E. Shive and is now operated under the name of the Shive Grain Co.

Denton, Tex.—A feed and cornmeal plant is under construction here for the Denton Produce & Poultry Co., which will equip it with recently purchased machinery from the plant of the Raiza Milling Co., at Lewisville, Tex., together with new machinery.

Greenville, Tex.—The International Milling Co. has started work on the construction of a 500,000-bu. addition to its elevator consisting of 18 tanks with 42 bins. Thirty-inch conveyors above and below will be driven by motors thru Link Belt Silent Chains. All bins will be equipped with Zeleny Thermometer system. The present head house will be raised 20 feet. Another diesel engine 300 or 600 h.p. will be added to furnish additional power. The Jones-Hettelsater Co. has the contract and work will be completed June 15.

UTAH

Wilson, (Delta p. o.), Utah.—The Ogden Alfalfa Mill, equipped with a diesel engine, which will grind 3,200 pounds of alfalfa in an hour, has been put into operation in a new building on the banks of the Weber River here. H. B. Hawkes is manager.

WISCONSIN

Spring Valley, Wis.—The New Richmond Roller Mills closed their elevator here on Mar. 1.

Hilbert, Wis.—Simon Schwabenlander, proprietor of the Hilbert Elvtr., has just completed installation of a modern seed treater.

Spring Valley, Wis.—Floyd Klanderman and Joseph Huenink have bot A. C. Ramberg's elevator and feed mill here and will operate under the name of the Valley Elvtr. Co.

Strum, Wis.—The Strum Co-op. Elvtr. Co. has gone into voluntary receivership and the elevator closed Apr. 13. Assets are reported to be about $3,000 and liabilities about $12,000.

Superior, Wis.—John H. Dolan, weighmaster for the Wisconsin Grain & Warehouse Commission for 16 years, died Apr. 5 at a local hospital, at the age of 56 years, following a brief illness. He had lived in this city 40 years.

Ripon, Wis.—Construction on the new elevator for the Badger Farmers Co-op. Elvtr. Co. (replacing its fire loss of February, previously reported) started on Apr. 13. It will be a 10,000-bu. house of reinforced concrete. The Chas. Gambsky Co. has the contract.

LaCrosse, Wis.—A proposition for the erection of a 500-barrel flour mill on the site of the Listman Mills (burned last October, as reported at the time) has been made to the Chamber of Commerce by the Smith Milling Co. Outside interests were raising over $100,000, it was said, and the city would raise a similar amount.

Milwaukee, Wis.—At the annual meeting of the Clearing House of the Milwaukee Grain & Stock Exchange, held Apr. 8, the following officers and directors were elected: Pres., W. A. Hottensen; vice-pres., E. J. Koppelkam; sec'y, Joseph Lers; treas., A. L. Flanagan. Directors: A. L. Bennett, G. W. Winston and E. H. Hiemke.

Milwaukee, Wis.—Recently elected members of the board of directors of the Milwaukee Grain & Stock Exchange are: For three-year-term—Charles F. Coughlin, A. L. Johnstone and E. J. Koppelkam; unexpired term, two years—W. A. Hottensen. Board of arbitration: William Eiteneier, Harry F. Franke and Paul E. Riebs. Board of appeals: Thomas M. Corcoran and O. R. Sickert. The supervisors of grain inspection and weighing are: A. L. Flanagan, Roy I. Campbell, H. H. Hicks, Arthur J. Riebs and Walter G. Zinn.

Shippers' Certificate of Weight

for use in advising receivers of the amount and grade of grain loaded into a car. Especially adapted for filing claims for Loss of Weight in Transit. Each certificate gives: "Kind of scale used; Station; Car Number and Initials; Shipper's Name;—lbs. equal to—bus. of No. —; Date scales were tested and by whom; car thoroughly examined and found to be in good condition and properly sealed when delivered to the ————R. R. Co.; Seal Record, name and number, sides and ends; marked capacity of car; date; name of the weigher." On back is a form for recording the weight of each draught.

Printed and numbered in duplicate. Originals on Goldenrod Bond; duplicates on tough pink manila in two colors of ink. Well bound with heavy hinged pressboard covers. 75 originals, 75 duplicates and four sheets of carbon paper. Size 4½x 4¾ inches. Weight 11 ozs.

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Price $1.00, plus postage

Grain & Feed Journals
CONSOLIDATED
332 So. La Salle St., Chicago

Patents Granted

2,034,449. Seed Disinfectant. Frederick L. Sharp, Blackley, Manchester, Eng., assignor to Imperial Chemical Industries, Ltd. A dry non-dusting seed disinfectant having its particles coated with a mixture of a major portion of wool fat and a minor portion of an oleaginous material selected from a group consisting of olive oil and petrolatum.

2,029,229. Grain Door. Geo. Gerlip, Neepawa, Man. The mechanism for sealing and unsealing the door comprises in combination with a swingable grain door a separable slidable sealing panel on each side of door and lever and link mechanism extending between the panels for synchronously sliding the panels towards or away from each other.

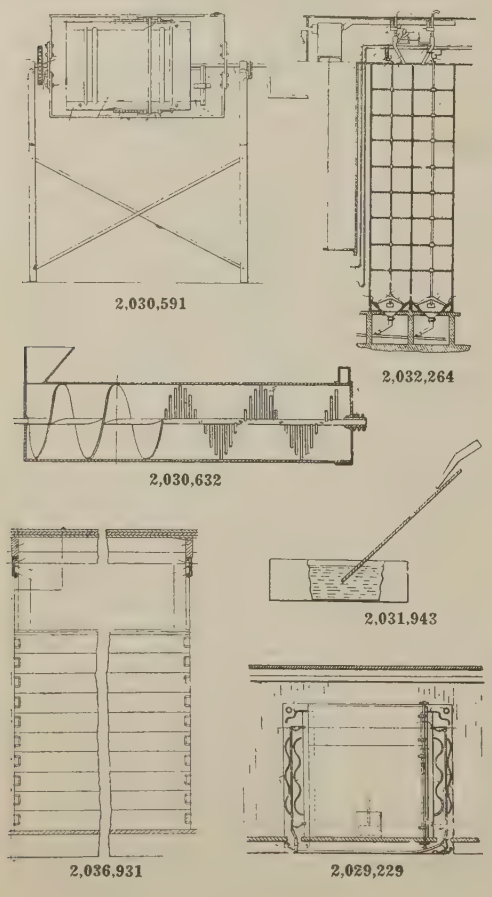
2,032,264. Preserving Grain in Storage. Jesse H. Davis, Baltimore, Md. The method of aerating stored grain, which consists in injecting and expanding air under pressure into the local hot spots in the grain so as to stir up the grain and the air therein directly in the hot spot regions under the air pressure and to cool the grain by reduction of temperature due to air expansion.

2,031,943. Separating Seeds. Frederick C Dyer and Harold L. McClelland, Toronto, Ont. A method of separating seeds from seeds by utilizing a difference in the wettability of their surfaces as distinguished from differences in specific gravity, size, or shape comprising treating the surfaces of seeds having a difference in surface wettability with a reagent adapted to increase the difference in surface wettability, introducing the seeds to an air-liquid surface in such a way that momentum of the seeds normal to the surface of the liquid is substantially eliminated, and floating the less wettable seeds from the more wettable seeds.

2,030,591. Seed Mixer and Agitator. Albert Holmquist, Holmquist, S. D. The mixer comprises a support, a laterally expansible cradle revolubly mounted on the support, a container clamping frame pivotally connected to the opposite sides of the cradle, frame being arranged for clamping longitudinally disposed container, and adjustable means pivotally connecting the side of clamping frame to a side of cradle, said means comprising a pivot mounted on side of the cradle, a toothed wheel concentric with said pivot and fixed against rotation relative to the side, and dog means mounted on the side of the clamping frame and normally engaging said toothed wheel to lock frame from rotating relative to cradle.

2,030,632. Separation of Onion and Garlic from Wheat. Bernard Hartz, Chrisney, Ind. The screw conveyor shaft has a series of agitating fingers extending close to the inner circumference of the cylinder. A cap closes the outlet end of the cylinder and is movably arranged thereon, adjustable spring means for resisting outward movement of the cap, the cap having a discharge port on the top part of the flange which is closed by a portion of the discharge end of the cylinder when the cap is in normal position and which moves beyond said portion of the cylinder when the cap is forced outwardly against the pressure of the spring means, a discharge tube having one end connected with the cap and receiving material passing thru the port, a suction producing device and a flexible conduit connecting the inlet of said device with a top part of the chute.

2,036,931. Grain Door. Henry W. Ethell, Erinview, Man. The door construction comprises vertical angle guides secured to the faces of the door posts remote from the door ways and positioned at a slight outward sloping angle theredown, a grain door adapted to be received against the car interior faces of the door posts comprising a multiplicity of individual sections stacked one above the other in grain tight abutments and each of said sections provided at either end, and on the car interior side with U shaped straps, said straps, bent around the ends of the sections and hooked over the flanges of the adjacent guides for vertical sliding movement of the sections thereon and such that the receding lower portion of the guides, thru the straps, will hold the lower door sections in a grain tight engagement with the interior faces of the door posts while the upper advancing portions of the guides, thru the said strips, will losely retain the upper door sections in position to be pressed into similar grain tight engagement with the door posts by the weight of loading grain.



Moving Cars Quickly

In the days of wagonload deliveries and small elevator legs country elevator operators depended upon their pushing neighbors, a pinch bar or car pusher to move each loaded car away from the loading spout and to replace it with an empty, but with larger and larger trucks delivering heavy loads in rapid succession, and modern elevating facilities loading the largest box car quickly, it becomes necessary for the enterprising elevator operator to provide dependable facilities for expediting the movement of both empty and loaded cars.

It is not practical for the elevator man to await the arrival of the local freight to pick up his loaded car and place an empty under his loading spout, he must load several cars today in order to make room for tomorrow's receipts.

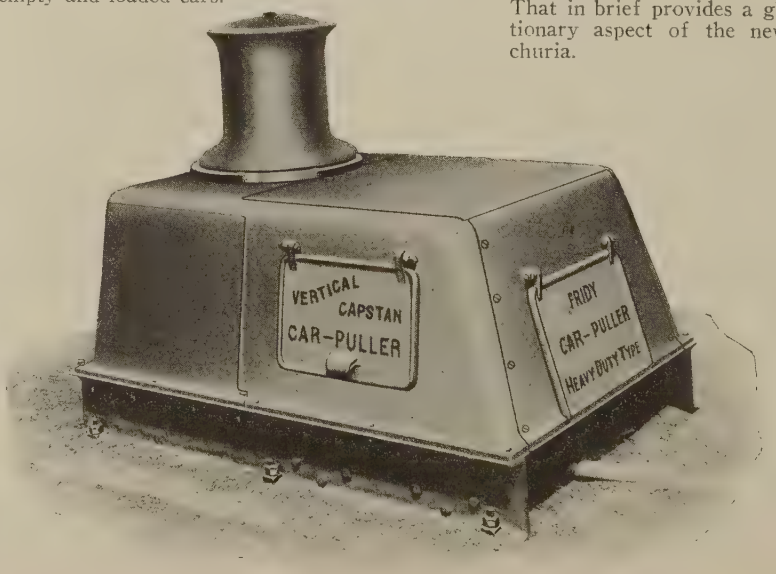
The Fridy Hoist & Machinery Co. have developed a vertical capstan enclosed type car-puller furnished in four standard motor ratings for handling a haul up to 500 tons.

The Junior Type are equipped with 7½ and 10 HP. motors maximum haul 250 tons, and of the single spur gear and worm gear drive, oversize vertical capstan or 10 in. dia. by 13 in. face are provided on both sizes.

The Heavy Duty Constructed Car-Puller are equipped with 15 and 20 HP. motors, the larger size will handle a haul of 500 tons at slow rope speed, a double spur gear of cast steel and a worm gear speed reducer greatly increases the pulling capacity of the car-puller, oversize vertical capstan of 12 in. dia. by 15¾ in. face are provided.

Vertical Capstans furnished on both types of car-pullers as above specified greatly reduces the slipping of the manila rope on the capstan when handling heavy hauls and which is of importance in freezing weather.

Both the motor and control equipment also the worm and spur gear drive are enclosed in a cast iron housing for weather and safety first protection, the complete car-puller mounted on a steel sub-base for installing on a concrete foundation.



Vertical Capstan Car Puller for Moving Cars Quickly

Miracle Bean as Major Crop

By Edward Jerome Dies

A brilliant new star has appeared in the agricultural skies. It is the versatile and resourceful little soybean. Hoary with age in the orient, its recent dizzy rise in America has caused the farm world to blink in wonderment.

Where it is going, what other magic it will perform, is anybody's guess. But the indisputable fact is that it has already written a new and colorful chapter in agricultural history, and has sent dollars jingling into the pockets of an ever-growing number of farmers.

Today intense interest centers in the immediate future—that is, the total of the new crop. The big crop of 39 million bushels last year, doubling the total of the year before, has occasioned some division of opinion as to the likely rate of increase. But experts agree that the humble little bean is on its way and that it will inevitably become a major money crop.

Across a vast mid-west garden the soybean is sprawling into larger acreage—from 1,200,000 in 1922 to 5,500,000 acres last year.

And if interest continues to grow as in the past, it bids fair to rate well up with corn as the premier farm crop within the next ten years. That in brief provides a glimpse of the revolutionary aspect of the newcomers from Manchuria.

Grain Carriers

Buffalo, N. Y.—The 74 vessels holding grain in winter storage have nearly been unloaded.

The Chicago, Great Western Railroad and the Keeshin Transcontinental Freight Lines have published a joint tariff for a co-ordinated rail and truck service.

The first steamer to enter Kingston harbor this season was the Grenville from Cape Vincent, N. Y., Apr. 9. Ice was jammed 20 ft. high outside in places.

Examiner C. K. Glover has proposed that railroads be relieved of fourth section long and short haul restrictions in making rates on salt and salt compounds in carloads.

Grain and grain products were loaded into 29,968 cars during the week ending Apr. 4, against 25,604 cars loaded during the like week of 1935, as reported by the Ass'n of American Railroads.

In I. & S. No. 4147, the Interstate Commerce Commission finds not justified the proposed reduced rates on soybean oil cake and meal to Pacific Coast points. The Commission will reconsider if new tariffs are filed granting similar reductions on cottonseed cake and meal.

Cold Weather in early April thickened the ice two inches on Lake Superior. Ice is up to 19 inches thick at Sault Ste. Marie, and 12 to 18 inches in the Straits of Mackinac; but navigation opened Apr. 8 between Lakes Erie and Huron when a steamship passed thru the St. Clair River.

Six Vessels of the Eastern Steamship Line have been sold to the Norris Grain Co., at a price in excess of $300,000. The boats are the Humphrey, Stewart and Taylor, which wintered at Port Dalhousie, the Halloway and Torian, now at Port Colborne, and the Warren, moored at Buffalo.

Railroad Commission's denial of motor carrier permit application was held to be legitimate exercise of police power to preserve highways, safety and convenience for the public, and was not an attempt to regulate interstate commerce altho interstate operation of trucks was affected. (Vernon's Ann. Civ. St. Arts 911a, 911b; Const. U. S. Art. 1, Sec. 8, cl. 3.)

National Oats Co. net earnings for the first three months of 1936 were $41,822, against $20,138 a year ago.

Truck and Barge Service by Government Line

In the annual report of the Inland Waterways Corporation (government) made public Apr. 7, Major General T. O. Ashburn, pres., says: "We are now investigating the pregnant possibilities of truck-water rates. It is probable that we shall inaugurate such a joint service out of Chicago and Kansas City experimentally."

Gen. Ashburn said: "A new service inaugurated during the year on the Missouri as far west as Kansas City, the barger going as far as Leavenworth, proved its worth from the start. We hope to handle large quantities of grain thru the elevator being built at Kansas City, Kan."

Sec'y Bartley of the barge line reported that the corporation received in 1935 free services from the federal government totaling $124,336.85. This does not include interest on the corporation's $24,234,405.96 investment. Alleged net profits of $525,876.94 for the 19 months prior to Jan. 1, 1936, would have been more than wiped out by interest charges at the rates paid by private enterprises.

Demand Investigation of Free Pick-Up and Delivery

The American Trucking Ass'n on Apr. 13 asked the Interstate Commerce Commission to broaden its inquiry on trucking service contemplated by the eastern roads in the suspended tariffs, to cover similar services rendered by railroads of the south and west.

The Ass'n asks the Commission to cancel all tariffs containing what the Ass'n terms a "rebate" to shippers who perform the trucking service for themselves.

A monopolistic and destructive competitive situation would be established, the Ass'n argued, if independent truckmen were regulated while the highway operations of the railroads were not.

Barge and Rail Haul Costs More Than All Rail

At the New Orleans hearing on joint rail and barge rates, W. B. McKinstry, comptroller of the Illinois Central, testified that in April, 1934, 422 carloads covering 13,656 tons of freight were interchanged between the Illinois Central and the barge line.

The operating expense was $4.22 per ton, against $2.93 all rail. If taxes and rentals were added the expense of the water and rail haul would have amounted to $4.43 per ton, against $3.38 all rail.

He said eleven port cities had benefited by payments of $301,115,000 in a number of years ending in 1933, while the barge line of the government spent only $44,613,000 in that time in those cities.

The Full Stomach Makes Customers

W. C. Walker, manager of the Farmers Cooperative Elevator & Livestock Co., Boone, Ia., is sold on the advertising value of a good dinner for the patrons and prospective patrons of the elevator, and its feed plant, every six or twelve months.

"Our supper in the local church last September," he says, "was attended by 120 farmers. A special speaker talked on How to Combat Livestock Diseases. Many of the farmers came in after the supper to talk to us about the problems discussed by this speaker and the expenditure of $50 for the supper was more than justified by the returns.

"Our purpose in having the speaker talk on Livestock Diseases was to call to attention the importance of using properly balanced rations, whether they be commercial feeds, our own mixtures, or farm mixtures. Keeping livestock in production is worth many times the added cost of a properly balanced feed.

"Now we are planning a dinner for the farmers' wives. It is the wives who raise the poultry, and for the occasion we count on a speaker to talk about proper methods of rearing and feeding poultry. Too often the farmers' wives buy too many chicks. As the chicks grow their appetites get bigger and if there are too many chicks the lady is apt to skimp on the feed. Better for her to have fewer chicks in the first start, and feed them well all the way to maturity."

The company's elevator handles 400,000 bus. of grain annually, and grinds 300 tons a year. This is sufficient evidence to support Mr. Walker's theory about talking to a man on a full stomach.

Supply Trade

Minneapolis, Minn.—We are happy to say that things are looking pretty good for us. If we get the spring rains we are expecting we will be mighty pleased.—Earl Ibberson, T. E. Ibberson Co.

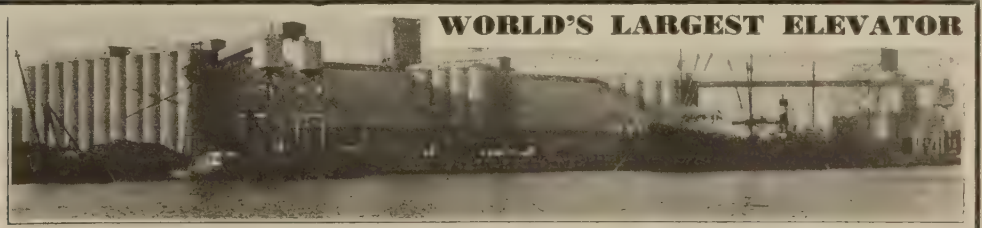
Minneapolis, Minn.—R. R. Howell & Co. have recently placed on the market an overhead truck lift, claiming that it is "as up-to-date as tomorrow." Readers of the Journal can get literature descriptive of this dump by writing the firm.

North Platte, Neb.—Business looks some better and with some more moisture in Nebraska, Colorado, Wyoming and South Dakota, there would be a large amount of improvements made in grain elevators in that section.—Harry Cramer, W. H. Cramer Const. Co.

The buying authority in many companies have moved up into the front office, often impenetrable to salesmen. It can be argued that they may be impenetrable to advertising, too; but the attempt by advertising costs but a few cents as compared with a few dollars in the case of personal solicitation.—Walter Buchen.

Chesterfield, Mo.—The Chesterfield Farmers Elvtr. & Sup. Co. has installed a new seed cleaner, the only one of its kind in this country. Known as the Cinderella Cleaner it is said to remove such foreign substances as garlic, onions, hedge-mustard, and other similar particles. Built upon the principle of separation according to weight.

New York, N. Y.—The poor inventor, frequently pictured as one who seldom reaps the material rewards of his ideas, may now be aided by the newly opened American Bureau of Invention, which has its headquarters in the General Motors Bldg. Practical help to the inventor in every step from the conception of the original idea to the merchandising of the finished product will be rendered by the bureau.



13,000,000 BU.—ALBANY PORT DISTRICT COM., ALBANY, N. Y.

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Manufactured by

O. W. RANDOLPH CO., TOLEDO, OHIO, U. S. A.

Field Seeds

Perry, Ia.—Fazel Bros., truck gardeners, have opened a seed store.

New Rockford, N. D.—Stanley Baeder has reopened his seed and feed business.

New Rockford, N. D.—A seed and feed store has been opened by G. Rupert.

Salem, Ore.—A seed and feed store will be opened here by F. J. Petzold of McMinnville.

Watertown, Wis.—O. C. Wertheimer, proprietor of the Watertown Grain Co., will sell all kinds of field and grass seeds.

Humboldt, Ia.—Farm seeds will be handled by J. F. Miller in the new feed store he has opened in a rented building.

Moorhead, Minn.—L. C. Weber has opened a branch office for the Northrup King Seed Co. in the Moorhead Storage Warehouse.

St. Paul, Minn:—The floor space of R. L. Gould & Co., seeds, has been increased by 25%, to take care of expanding stocks and trade.

Junction City, Ore.—A large seed and grain warehouse of frame construction is being erected by the Willamette Valley Seed & Grain Co.

Delphos, O.—The City Flour, Feed & Seed Store, carrying a full line of field and garden seeds, is a new firm under the management of Vincent Odenweller.

Eagle Grove, Ia.—Grass and legume seeds have moved particularly well this season. We have moved three carloads. The reason is the soil conservation plan.—John Potgeter, Potgeter Grain Co.

Dyersville, Ia., April 15.—Grass seed business has been fine. Expect a 5% increase in acreage as 60% of the farmers will take advantage of the soil conservation program. —H. A. Fleckenstein.

More than 80 varieties of grain and forage sorghums are commercially grown in the United States. Most of them can be improved by the plant breeder, and many are now being changed to meet farm requirements.

Princeton, Ill.—The Pioneer Hy-Bred Corn Co., of Des Moines, is reported considering establishment of a hy-bred seed corn plant here. Erection of a drying plant and production of the seed corn on 200 contracted acres is the plan.

St. Louis, Mo.—March receipts of kafir were 11,200 bus. and of hay 588 tons, against kafir 7,800 bus. and hay 1,342 tons in March, 1935. Shipments during the same period were: Kafir 1,400 bus. and hay 418 tons, against kafir 1,200 bus. and hay 390 tons in March, 1935.

Sioux City, Ia.—The growth of the Sioux City Seed Co. has led to an increase in the authorized capital stock to $1,000,000. The company was organized Mar. 14, 1884, with a capital of $30,000. J. S. Michael is chairman of the board of directors, and H. A. Beals is sec'y.

A new variety of Korean lespedeza has been tested for three years by the U. S. Department of Agriculture in states as far north as Northern Illinois where the growing season is not warm or long enough to produce seed from ordinary lespedeza. Fair to good seed crops were obtained from the tested variety at Holgate, O., and Kalamazoo, Mich. A little seed was produced as far north as Madison, Wis. Seed is not yet available for general planting.

New York, N. Y.—March receipts of flaxseed were 440,000 bus., compared with 770,000 bus. in March, 1935. March shipments of clover seed were 9,676 bus., compared with 6,624 bus. in March, 1935. Shipments of timothy seed in March were 456 bus.

Seattle, Wash.—Dealers in seeds are properly classed as "produce jobbers," as regards sales of seed made by them to other wholesalers. Measure of business tax on a "produce jobber" is "gross earnings" at ½%, rather than "gross proceeds of sales," at ¼%. This means that a seed wholesaler (i.e., one selling to other wholesale dealers) should pay at ½% on gross earnings. The situation, in short, is the same for a seed wholesaler as for a wholesaler in grain, hay or straw.—Floyd Oles.

Fortuna and Rexoro rices of superior culinary qualities, developed in cooperation with the Louisiana stations, were grown on a larger acreage in Louisiana and Texas in 1934 than in previous years, the two varieties occupying approximately 31,000 acres. Based on maximum producers' prices, these varieties are valued at 70 and 75 cents per barrel more than Early Prolific, and 30 and 35 cents more than Blue Rose. The acre yields of the four varieties were about the same in 1934. From the acreage sown to Fortuna and Rexoro, the increase paid to growers over an equal acreage of Early Prolific and Blue Rose, therefore, was approximately $280,000 and $125,000, respectively.

Topeka, Kan.—We have reason to believe from reports of tests made at Manhattan, that a large proportion of corn farmers are holding for seed will show less than 50 per cent germination. A considerable amount of corn from an indefinite origin has been offered by truckers from sacks tagged showing a test of 90 or better. Avoid purchase of seed from persons of unknown responsibility. Buying grain which is not adapted to the region in which it is to be planted, or which has not been accurately tested for germination is a waste of time and money. The state laboratory at Manhattan is over-run with samples and from what information we have it is doubtful whether the samples they have will be cleaned up before May 1. We would suggest that the "rag doll" test be made.—E. J. Smiley, sec'y Kansas Grain Dealers Ass'n.

Little Rock, Ark.—Inspectors of the Arkansas Plant Board last week issued stop-sale notices to 13 merchants at Wynne, Jonesboro, Helena, West Helena, Marianna, Marvell, Elaine, and Pine Bluff, on a total of 209 bags of seed found on sale in violation of the Pure Seed Law, which requires that all seed sold be tested and tagged. In most cases the seed bore no analysis tags. In other cases one or more of the statements required by law were missing from the tags. The seed held was as follows: 35 bags Korean lespedeza, 78 bags corn, 57 bags soybeans, 18 bags cotton seed, 9 bags oats, 7 bags Sudan grass, 5 bags cane seed. The Plant Board has heretofore refrained from starting proceedings against retail merchants in whose stores untagged seed was found on sale, but it now appears that prosecutions may be necessary to secure compliance. Merchants are advised to examine all incoming shipments of seed, regardless of who the shipper may be, and to refuse to accept same unless each bag bears a tag giving the information as required by law.

Ames, Ia.—F. Scott Wilkins, member of the Iowa State College Agricultural Experiment Station staff, who died March 31, was one of America's leading authorities on soybean production. As a research worker in charge of forage crop production for the Experiment Station, Mr. Wilkins spent more than 15 years experimenting with soybean culture and determining the value of various varieties.

Seed-loan data regularly compiled show that these loans continue to be of importance from the standpoint of number of borrowers. Despite 2 years of operation of the new production-credit system, the number of seed loans has been large in some areas where farm income has shown marked recovery, particularly in the Southern States. For example, in Virginia, North Carolina, South Carolina, and Georgia there were 117,016 seed-loan borrowers in 1934 and 90,193 in 1935. This continued borrowing has an important bearing upon the development of agricultural-rehabilitation policies, and the experience gained in extending seed-loan credit offers a wealth of pertinent data. A preliminary analysis of seed-loan financing since 1921, with particular reference to four southeastern cotton States, is now being prepared, states the Buro of Agricultural Economics.

Hybrid Seed Corn Must Be First Generation Cross

Seed corn shipped in interstate commerce as "hybrid seed corn," in order to comply with the Federal Seed Act, must be seed of the first generation of a cross between strains of different parentage and involving one or more inbred lines of corn or their combinations. Second and succeeding generations of such corn crosses are so much inferior in productivity to first generation hybrid seed, that their sale as hybrids constitutes a fraud on the buyer, rendering seller liable to prosecution.

New Seed Trade Marks

L. Klein, Inc., Chicago, Ill., No. 372,102 for lawn seed. The words "Fern Park."

Paul N. Smith, doing business as The Paul N. Smith Seed Co., Center Junction, Ia., No. 371,004, for seed corn. The word "King-O-corn."

T. W. Wood & Sons, Richmond, Va., No. 371,376 for grass seed. The words, "Wood's 'Super-Green' Lawn Grass Seed" arranged one below the other.

John T. Russell, doing business as Russell-Heckle Seed Co., Memphis, Tenn., No. 333,707 for seed corn, is not subject to opposition. Representation of an ear of corn, partly shucked, and the words, "Harpeth River Seed Corn."

McGregor Milling & Grain Co., McGregor, Tex., Nos. 371,066; 371,067; 371,068, for grain of all types, particularly oats, wheat, corn, rye, and barley. Green, red, and yellow tags, respectively, bearing imprints of a sheaf of oats, a map of Texas and the word "Texas," an arrow, a dot, and the word "McGregor."

Directory

Grass and Field Seed Dealers

CRAWFORDSVILLE, IND.
Crabbs, Reynolds, Taylor Co., clover, timothy.

GREEN SPRINGS, OHIO
The O & M Seed Co., seed merchants.

PAULDING, O.
Stoller's Seed House, wholesale field seeds.

ST. LOUIS, MO.
Mangelsdorf & Bro., Ed. F., wholesale field seeds.

SIOUX CITY, IOWA
Sioux City Seed Co., seed merchants.

Allowable Variation in Seed Corn Tests

The Seed Analysts' Ass'n of North America has recognized by experiment and experience that natural variability exists, and allowances have been set up which are officially accepted by the ass'n.

The table of tolerances as allowed by the analysts is as follows:

Seed corn testing 90 per cent or over—6 per cent variation.

Corn testing 80 per cent or over but less than 90 per cent—7 per cent variation.

Corn testing 70 per cent or over but less than 80 per cent—8 per cent variation.

Corn testing 60 per cent or over but less than 70 per cent—9 per cent.

Corn testing less than 60 per cent—10 per cent.

Retest the Seed Corn

By R. F. Crim of University Farm, St. Paul

Disappointment lies ahead for many corn growers who take chances this spring on the germination of their seed or who plant varieties that are not adapted to their location.

With the seed corn situation so critical this year every farmer is urged to test his seed carefully before planting. Those who tested last fall or in early winter should retest to see how their seed has held up in vitality. When it is impossible to obtain seed that will germinate satisfactorily, meaning 90 per cent or above, seed of lower germination may be planted provided the planter is adjusted to drop more kernels per hill. Tests have shown that this thicker planting of seed of rather low germination distributes the stand fairly well.

According to reports, a good deal of seed corn has been sold in Minnesota that was grown in central or southern Illinois, southern Iowa, and Missouri. Even tho corn from these regions might germinate 100 per cent, it would not be wise for Minnesota farmers to use it, as it probably will not mature properly even for silage.

Tho Minnesota hybrid corn, developed by the Minnesota Agricultural Experiment Station, is much superior to ordinary farm varieties, farmers are cautioned to take care in buying hybrid seed. Some people are making a racket out of selling fake or inferior hybrids.

Owing to the extreme shortage of good seed this year, the use of advanced generation commercial hybrid seed may be justifiable, but such corn probably will prove no better than standard varieties and so no premium should be paid for it.

Longer Germination Test Shows Weak Seed

Growers who count out all germinating seed of corn and soybeans as good live seed after three or four days in a germinator are likely to be disappointed in the field performance of such seed this year, according to Purdue University agronomists, who point out that much seed that looks as if it will grow satisfactorily after a few days' tests, has been found to be too weak to grow vigorously if the test is continued for a week or longer. Such weak seed planted in soil at the Purdue University Agricultural Experiment Station greenhouses has made very poor growth, indicating that in most cases such weak seedlings will die before they reach maturity.

It has been found that many samples of soybeans test below 80 per cent in germination, and tests of 50 per cent are not unusual. As a rule, fully matured seed harvested early last fall is germinating satisfactorily, but some soybeans were high in moisture during the low temperatures in October, and the germination was reduced even before harvest. The soybeans harvested late in the fall did not dry down to a safe moisture content in some cases, and germination tests are necessary to determine whether such seed will grow vigorously. Weak soybean sprouts will have considerable difficulty in coming thru the soil, and making good stands, unless growing conditions are very favorable.

Germination tests thus far indicate that very few spring harvested soybeans are suitable for seed, but supplies of fall harvested seed should be adequate to meet the demand.

With both corn and soybeans, the Purdue agronomists emphasize that enough testing is necessary this spring to determine both the germination and vigor. It is highly important that seedlings be given a seven or eight day test where temperatures range around 75 degrees, and longer if temperatures are below 70. It is equally important that samples be drawn from a number of places in both cribs and bins before conclusions are reached regarding germination. Cribs of corn have been sold for seed with tests on the surface of the crib only, and after considerable quantities have been shelled and sold, it has been found that corn in the interior of the crib was low in germination, and not suitable for seed unless individually ear tested. The only way to assure good germination of seed this spring, say the Purdue specialists, is thru an extensive testing program.

Iowa Hybrid Corn

Iowa hybrid No. 931, a yellow corn, is the earliest station double cross in commercial production. Best adapted to the second tier of Iowa counties from the north. The average of five years' results in the Northern Section of the Iowa corn yield test gives this hybrid a lead of 9 bus. over open-pollinated varieties and in every comparison a stronger, more erect stalk.

Iowa hybrid No. 942, yellow, is best adapted for tiers of counties 3, 4 and 5 from the north. The Iowa corn yield test results in the north central section, gives this hybrid a lead of 8½ bus. more than the average of the open-pollinated strains, and in every comparison a stronger, more erect stalk.

Iowa hybrid 939, also yellow, has the same maturity and adaptation as Iowa hybrid 942. It has a slightly stronger stalk than 942 and is equal to it in yield.

Iowa hybrid 13 is yellow and adapted to the southern portion of the state. The Iowa corn yield test results in the southern section give this hybrid an advantage of 12 bus. over the average of open-pollinated strains and a superiority in strength of stalk.

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Clover and Timothy Seeds
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A certain feeling of satisfaction and confidence goes with the planting of O & M seeds. Their excellence, uniformity, dependability and yield have completely won over thousands who wouldn't think of accepting a substitute.
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Crop Improvement Work Needed

Records of the Federal Grain Supervision are proving useful in ascertaining the localities from which grain is shipped that grades down because of certain factors that may be overcome by crop improvement workers concentrating their efforts in those localities where the need is greatest.

For example, during July and August, 1935, the inspected receipts at Cincinnati and Louisville showed 11 cars of garlicky soft red winter wheat originating in Hamilton County, and not more than 3 cars in any one other Ohio county.

During those two months five inspection points received 15 cars containing dockage from Gallatin County, Ill., 19 from White County, 8 from Macoupin County and considerably fewer from any other county in Illinois.

Bartholomew County, Ind., shipped 19 and Rush County 12 cars of soft red winter wheat containing matter except other grains (mostly cockle).

Out of 309 cars of soft red winter wheat received at Baltimore and Philadelphia during July and August from Maryland, Talbot County contributed 85 and Queene Annes County 70 cars containing dockage. Kent County alone contributed 253 of the 1,040 cars containing garlic.

St. Louis, Mo., received 233 cars with dockage, mainly chess, 76 coming from St. Charles County, and 46 from Lincoln County. St. Charles County contributed 212 of the 320 cars with garlic received at St. Louis, East St. Louis and Louisville, from Missouri.

Chester County, Pa., shipped 170 of the 284 cars of garlicky wheat received at Philadelphia and Baltimore from Pennsylvania.

Five inspection points received 454 cars of blighted barley from Iowa, 71 originating in Dickinson County, 51 in O'Brien County, 36 in Sioux, 30 in Emmett, and 24 in Osceola County, during August and September.

Minnesota shipped 442 cars of blighted barley to the same terminal markets, 51 from Faribault County, 49 from Jackson, 36 from Martin, 35 from Nobles, all along the Iowa border, Polk County, in the northwestern part of the state, showing up with 19 cars.

Kansas shipped 879 cars of mixed wheat during July and August to Kansas City, Wichita, Hutchinson and Fort Worth, of which most was from the northeastern part of the state, Marshall County shipping 81 cars, and Washington County, 78 cars.

Imports of Forage Plant Seeds

Imports of forage plant seeds during March and during the 9 months prior to Apr. 1, 1936 and 1935, as reported by the Buro of Plant Industry, have been as follows, in pounds:

	March		July 1 to Mar. 31	
	1936	1935	1935-36	1934-35
Alfalfa	20,400	10,600	37,400	115,400
Bluegrass, Canada	4,500	3,600	121,500	90,800
Brome, smooth	70,600	25,600	487,800	297,000
Clover, alsike	.....	.....	11,200	700
Clover, crimson	.....	.....	2,148,800	196,700
Clover, red	.....	10,500	.....	63,400
Clover, white	129,300	42,500	1,129,100	915,700
Grass, orchard	130,000	135,600	576,600	260,500
Millet, foxtail	.....	1,476,300	280,500	2,234,700
Mixtures, clover	.....	1,400	.....	1,400
Rape, winter	592,500	129,400	6,925,700	7,398,400
Ryegrass, Italian	.....	1,800	29,900	33,800
Ryegrass, perennial	50,900	3,100	377,500	378,400
Timothy	100	862,200	700	3,265,400
Vetch, common	.....	.....	.....	8,800
Vetch, hairy	.....	.....	1,550,400	21,800
Bentgrass	.....	.....	21,700	8,100
Bluegrass, annual	.....	.....	.....	5,300
Bluegrass, rough	22,800	11,500	394,800	265,000
Bluegrass, wood	.....	100	1,600	100
Bromegrass	.....	.....	.....	4,000
Clover, strawberry	100	.....	400	100
Clover, suckling	4,000	3,000	51,200	17,600
Dogtail, crested	.....	200	18,100	11,600
Fescue, chewings	63,100	600	428,700	576,100
Fescue, other	1,100	22,500	68,600	51,400
Grass, carpet	.....	.....	300	9,600
Grass, Dallis	300	.....	19,400	30,500
Grass, molasses	.....	.....	5,000	.....
Grass, rescue	.....	.....	12,000	3,400
Grass, Rhodes	1,500	.....	7,200	8,900
Grass, Sudan	.....	890,100	206,100	3,272,400
Grass, velvet	.....	.....	3,900	600
Medick, black	400	2,000	31,500	10,200
Millet, Japanese	.....	.....	.....	283,500
Sweetclover, white	1,400	300	1,400	3,600
Vernalgrass, sweet	.....	.....	200	100
Wheatgrass, crested	...	600	74,300	3,300
Wheatgrass, slender	.....	.....	3,500	96,900
Yarrow, common	.....	.....	100	2,100

How to Make a Seed Duster

A dust-tight mixer which will thoroly coat the disinfecting powder over every seed is shown in the plan reproduced herewith.

Of the several types of home-made machines that may be used for the dry dust treatment of seeds, the thirty-gallon double-acting mixer illustrated has proved the most efficient. This double-acting dusting machine rolls and throws the seeds against a mixing board and in addition surges them from one end of the barrel to the other. These two motions cause the dust to be evenly and completely spread over every seed, thus insuring the most efficient disease prevention and control.

The materials needed for the construction of such a seed dusting machine have been found to cost from $1.25 to $5.00, with an average of $3.50. They consist of:

For the Mixing Container — A thirty-gallon steel oil drum which may be purchased from almost any garage or hardware store. If one cannot be readily obtained, a thirty-gallon wooden barrel may be used, but steel drums are preferable.

For the Mixing or Baffle Board—To make the mixing or baffle board one must have:

1 piece of wood 1 inch thick, 8 inches wide and 18 inches long.

This board should be planed smoothly on all surfaces.

For the Door—To make the door one needs the following articles:

1 piece of 1-inch board 6 inches wide and about 17½ inches long.

1 semicircular piece of board 1 inch thick which has the same length as the diameter of the barrel (about 17½ inches) and is 1 inch wider than one-half the diameter of the barrel, or about 10 inches.

1 pair of 8-inch strap hinges.

14 ¼-inch carriage bolts about 2 inches long.

These bolts should be sawed off flush with the nuts after being fastened into the drum head and cover.

For the Axle and Crank—There are required for the axle and crank the following pieces of standard 1-inch black or preferably galvanized iron pipe:

1 piece—48 inches long threaded at one end.
1 piece—10 inches long threaded at one end.
1 piece—10 inches long threaded at both ends.
2 standard 1-inch iron elbows.

Also needed are two 2-inch cotter pins or two large nails and two 1½-inch iron washers.

For the Support Standards — Sawhorses or other convenient means of support are generally available on nearly every farm. However, if a special set of new horses are made, they should be 34 inches high and 3 feet long.

Method of Construction.—The parts of the duster can easily be assembled with simple household or farm tools by observing the following directions:

The Drum and Head—One-half of one of the heads of the steel drums is cut out with a chisel or hack-saw and the rough edges are hammered or filed until smooth. A strip of wood 1 inch thick, 6 inches wide and of the proper length to fit snugly against the sides of the barrel (probably 17½ inches wide) is bolted to the remaining half of the head so that about 1 inch of the edge of the steel head extends beyond the board toward the opening. The semicircular wooden head is next cut to fit snugly into the open half of the drum head. Next bolt the strap hinges in place so that the wooden half of the head will open. If this head does not have a dust-tight fit, nail around its edge a piece of heavy felt, or a strip of rubber cut from an old inner tube. Use a hinged hasp to hold the door shut, and attach it so the door will be forced tightly against the edge of the drum when closed.

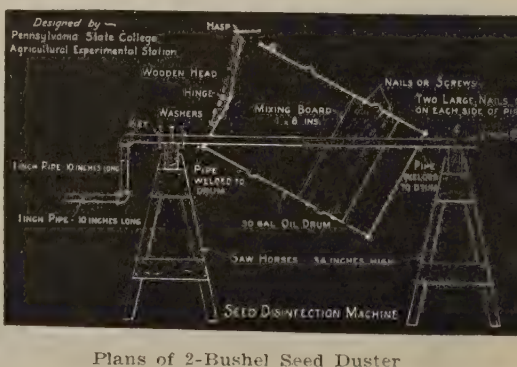
The Mixing Board—The mixing board is placed across the inside of the drum about two-thirds of the way back from the opening and at right angles to the straight side of the door. The board is held in place by screws or nails passing through the side of the drum into the ends of the board.

The Axle and Crank—The axle and crank are assembled according to the blueprint above. The axle should pass diagonally through the drum and should extend beyond both ends of the barrel for about 8 inches. The drum is best anchored to the axle by being welded to it. If it is impossible to have this welding done at an auto repair shop, bolt the axle to the drum by passing bolts through holes drilled through the drum and axle.

To keep the drum from sliding in the sawhorse bearings, two washers should be placed over the axle at the crank end and held in place by cotter pins passing thru holes drilled in the axle.

The Support Standards — The dusting drum should be turned on a level axis. This can best be done by placing the drum between two sawhorses, which should be at least 34 inches high. Bearings for the axle to turn in can be made by driving two large nails or lag screws into the sawhorses, one on each side of the axle, and applying a little axle grease. If more elaborate axle bearings are desired, they may be cut out of hard wood and lined with sheet iron.

Use this duster to treat seed grains with Ceresan, seed corn with Semesan, Jr., vegetable seeds with Semesan. Any dust such as copper carbonate may be used in this duster.



Plans of 2-Bushel Seed Duster

Use More Seed If Germination Is Less

By H. D. HUGHES, Iowa State College

Farmers who have seed corn of a good strain which does not germinate well may expect a satisfactory yield if they determine the exact germination and increase the rate of planting in proportion to the percentage of kernels which do not germinate strong. For example, seed which germinates only 75 per cent strong should be planted 25 per cent thicker than one would plant if the germination were 100 per cent strong.

The Nebraska Experiment Station reports the results of careful studies made in the dry season of 1931 in which seed corn germinating 100 per cent was planted 3 kernels per hill, seed germinating 75 per cent was planted 4 kernels, and that germinating 60 per cent was planted 5 kernels; all gave almost exactly the same acre yields.

The number of stalks per hill varies considerably when imperfectly germinating seed corn is planted thick, but it has been found that this does not necessarily mean a decrease in yield. Studies on uniformity of planting were continued thru a 14-year period, comparing the results from planting 2, and 4 kernels in alternate hills and 1, 3 and 5 kernels in adjoining hills with a uniform planting of 3 kernels. It was found that the yield from the different uniformities differed only by a little more than 1 bushel per acre.

It is important that one shall know very definitely just what the percentage of strong germinating kernels is and increase the thickness of planting in just that proportion. The same lot of seed should be tested several times in order to be sure of its exact value.

The Iowa Station a number of years ago found with a total of more than 45,000 individual ear tests that when planted at the regular rate of 3 kernels per hill, the use of ears from which one of the six kernels tested showed a weak germination decreased the stand 6 per cent and the yield 3½ bus. Planting ears which showed one dead kernel among the six decreased the stand 11 per cent and the yield 6 bus. per acre.

Enforcement of the Federal Seed Act

By Frederick D. Richey, Chief of the Buro of Plant Industry

All importations of seeds subject to the Federal Seed Act are sampled by the Customs Service, the samples are tested for quality by this Division, and the collectors of customs are notified of the results. During the fiscal year ending June 30, 932 lots (26,272,700 pounds) were permitted entry and 69 lots (5,258,200 pounds), mostly Manchurian millet were rejected, altho the major part of this rejected seed was later recleaned and permitted entry. The total number of permitted entries includes these lots of recleaned seed. Owing chiefly to the present import duty, there was only a very small importation of alfalfa and practically none of red clover and alsike clover, with the exception of American goods returned. Because of the unusual shortage of certain seeds of which the United States normally produces an excess, there were importations of important amounts of timothy, oats, and foxtail millet, which are subject to the Federal Seed Act, and Sudan grass, which is not. This is the first year that imports of timothy have been of importance.

In the enforcement of section 6 of the Federal Seed Act, prohibiting the interstate shipment of misbranded seeds, 20 criminal prosecutions and 34 seizure cases were reported by the Department of Justice as terminated, and 23 criminal cases and 8 seizure cases were pending at the close of the fiscal year. Investigations were in progress relative to approximately 110 cases reported by various states as violations of the act.

As a result of the enforcement of the interstate section of the act, seed dealers are taking more interest in varietal identity and seed testing. Misbranding as to variety, particularly of rye, soybeans, sorghum, and oats, has been given increased attention. Owing to the similarity in appearance of seeds of different varieties, it has become necessary for the Buro, wherever possible, to develop means of making varietal identification in the seedling stage.

Patent Seed Disinfectants

By Professor J. E. Howitt, Ontario Agricultural College

Many patent seed disinfectants are now on the market. Many of them are very effective but some of them are deadly poisonous and most of them are rather costly. Our experiments show that none of them prevent smut better than the formalin and copper carbonate dust used as recommended. They are, however, easy to apply and many wish to use them, so we have therefore experimented with them.

The following patent seed disinfectants have been found by the Department of Botany satisfactory for the control of oat smuts:

Improved Ceresan; Wawa Dust.

The following patent seed disinfectants have been found effective for the prevention of stinking smut or bunt of wheat:

Smutbane; Sanoseed; Improved Ceresan; Wawa Dust.

Ethyl Mercuric Phosphate Dust Treatment —(Improved Ceresan). This is one of the most widely advertised dusts on the market at the present time. It has been found satisfactory in the control of stinking smut or bunt of wheat, oat smuts, covered smut of barley, and black loose smut of barley. Apply at the rate of one-half ounce per bushel in a dusting machine or as recommended in the directions on the container. The dusted grain should be kept in a bin, pile, wooden box, or sacks for at least ten hours. During this period, dusted grain should remain uncovered. Treated grain may then be seeded at once or stored for at least four weeks. This treatment has the advantage of being applicable to wheat, oats and barley and is easily applied, does not cake the drill and is non-corrosive to drill parts, as is the case with copper carbonate. Seed treated with this chemical should not be fed to farm animals. Do not use more than one-half ounce of this disinfectant per bushel for fear of injuring germination of the grain.

Caution: Most of the dusts used in seed treatment are more or less poisonous.

In using them treat seed outdoors or in a well ventilated building.

Avoid inhaling large quantities of the dust. Wear a dry cloth or dust mask over the nose and mouth.

Do not feed treated seed to farm animals.

Protest Imports of Farm Products

At the call of the Sioux City Chamber of Commerce a non-partisan farm conference with nearly 1,000 in attendance was held at Sioux City, Ia., Apr. 14, J. C. Mullaney, pres. of the Chamber, presiding.

In the convention hall at the Martin Hotel were displayed beef from Argentina, corn from the Danube, ham from Poland, pork from New Zealand, and wheat from Canada, all bought in the United States.

The speakers laid stress on the harm done to producers in the United States by this influx of foreign produce, depriving the American farmer of his home market.

D. M. HILDEBRAND, of Seward, Neb., pres of the United States Live Stock Ass'n, was the first speaker.

JOHN BRANDT, pres. of the Land O' Lakes Creameries, followed with an able portrayal of conditions in the dairy industry. Butter is being imported from Denmark and New Zealand, the increase in imports in 1935 over 1934 having been 1603 per cent.

O. L. Brownlee, Sioux City, was appointed chairman of the resolutions com'ite, assisted by J. T. Buchanan, pres of the Omaha Grain Exchange, and others. In part the resolutions declare:

Resolutions Adopted

Whereas, the existing problem has been still further aggravated by virtue of an act of Congress, known as the Reciprocal Trade Agreements act of 1934, the government of the United States having deemed it expedient to enter into so-called reciprocal trade agreements with certain nations, whereby material reductions have been made in tariffs applying to various raw materials products of the farms, forests and mines and substitutes therefor, and

Whereas, under the stimulus of these agreements, imports of livestock, fresh and cured meats, corn, wheat, oats and other grains, dairy products, poultry, vegetable and animal fats and other farm products and substitutes therefor have been greatly increased, thereby reducing the income and purchasing power of American farmers by lowering the ceiling price of all such products when sold in the domestic market, by depriving farmers of the central states of the seaboard markets for cereals and other products, and by curtailing the use of American farm products in domestic industries, and

Whereas, similar tariff reductions have resulted in increased imports of certain ores, lumber and other raw material products of the forests and mines, thereby reducing the incomes and purchasing power of those engaged in these industries and depriving American labor of employment in the raw materials industries of the United States, thus further curtailing the domestic market for the products of American farms, and manufactories, and,

For Repeal of Reciprocal Trade Agreements

Resolved, that we hereby recommended that all farmers and farm organizations, laborers and labor organizations, manufacturers and manufacturers' ass'ns, civic and other organizations, timber, oil, pulp, chemical, mineral and other basic industries engaged in the production, processing and distribution of raw material products and articles of manufacture, acting individually and thru their respective associations, unite their energies and influence in unified effort to induce the Congress of the United States to enact legislation of the following nature to serve the purposes herein described:

"First—To effect the immediate repeal of the Reciprocal Trade Agreements act of 1934 and abrogate all trade agreements made thereunder, thus restoring all tariff schedules to the status quo previously existing, pending an adequate revision, as suggested in paragraph 3 below, and returning the sole treaty-making power to the United States Senate.

Restrict Imports

"Second—To restrict imports of all raw materials products of farms, forests and mines and substitutes therefor and manufactured goods to quotas based on proven actual national requirements of same.

Raise Tariffs

"Third—To effect an immediate, adequate and upward revision of tariffs on raw materials products of the farms, forests and mines to the extent that there shall be tariff parity between raw materials and manufactured goods.

Develop Home Industry

"Fourth—To develop to the fullest extent possible, by utilization of subsidies, equalization fee, or some similar principle, all available foreign markets for American products, and to foster and stimulate the establishment of new industries which, thru applied science, will utilize vegetable and fibrous crops representing surpluses or which can be grown on American farms in place of raw materials now imported.

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Feedstuffs

Metal fasteners for attaching tags to bags of feedstuffs are prohibited by the new Virginia law, providing for a fine of from $25 to $250.

San Francisco, Cal.—March receipts of bran were 240 tons and of hay 696 tons, compared with bran 250 tons and hay 708 tons in March, 1935.

Atlanta, Ga.—The educational service of the National Cottonseed Products Ass'n has opened a southeastern office here with J. E. Moses in charge.

New York, N. Y.—March receipts of millfeed were 52 tons, compared with 250 in March, 1935. March receipts of hay were 47 tons, compared with 55 tons in March, 1935.

Cincinnati, O.—March receipts of grain sorghums were 1,400 bus., feed 390 tons and hay 1,617 tons, compared with grain sorghums 1,400 bus., feed 570 tons and hay 418 tons, in March, 1935.

Providence, R. I.—A feed law similar to the Uniform Law approved by the American Feed Mfrs. Ass'n has been proposed for Rhode Island, in a bill calling for a brand registration fee of $15 annually.

A shipment of 150 sacks of dairy feed from Chicago to Beaver Dam, Wis., was seized by the government because the fiber exceeded and the protein fell short of the 12 per cent and 16 per cent stated on the label.

Peoria, Ill.—March receipts of millfeed were 14,320 tons and of hay 30 tons, against millfeed 8,440 tons and hay 1,000 tons in March, 1935. Shipments during the same period were: Millfeed 16,603 tons and hay 10 tons, against millfeed 9,740 tons and hay 560 tons in March, 1935.

Minneapolis, Minn.—"Progress in State Control of Vitamin D Supplements" will be the subject of an address by H. A. Halvorson, chemist in charge of feeds and fertilizers, of the state department of agriculture, at the meeting of the American Ass'n of Cereal Chemists, to be held Apr. 24 in the pioneer room of the Andrews Hotel.

Washington, D. C.—Only about 1,188,000 head of cattle were on feed in the 11 corn belt states Apr. 1, against an estimated 928,600 head in 1935 and 1,428,600 two years ago. Increases over a year previous were general for all 11 states. South Dakota showed the biggest recovery, up to 120%; Nebraska, 40%; Wisconsin, 33%; Indiana, 31%; Kansas, Illinois and Michigan, 30%; Iowa, 21%; Ohio, 20%; Missouri and Minnesota, 15%. Compared with two years ago, however, Kansas still showed a shortage of 54%. Nebraska was off 41%; Missouri, 31%, and the corn belt, 18%.—U. S. Dept. of Agriculture.

Washington, D. C.—Alfalfa meal production during March totaled about 16,500 tons, compared with output of about 16,740 tons in February. Production during March totaled only 10,070 tons last year and 11,580 tons two years ago. Output, June through March, this season, amounted to about 187,420 tons compared with 160,140 tons for the same period last year and 179,410 tons two years ago. Distillers dried grains production of about 14,550 tons during March was the largest monthly output since data became available a year ago and was about 1,480 tons larger than the February production. Shipments for the month were also the largest on record and totaled 14,730 tons.—Buro of Agricultural Economics.

New Feed Trade Marks

Calcium Carbonate Co., Chicago, Ill., No. 373,247, for poultry grit. The word "Hen-Dine" imposed on an outline of an egg.

Tioga Mills, Inc., Waverly, N. Y., Nos. 372,936; 372,937; 372,938, for dog food. The words "Balo-Meal," "Balo-Bites," "Balo-Food," respectively.

General Stores Inc., Beckley, W. Va., No. 367,501, for dairy and poultry feed. A circular monogram outline, inclosing the monogrammed letters "G S."

Montana Flour Mills Co., Great Falls, Mont., No. 369,200, for livestock feed. The words "Molas-o-Cubes."

Standard Rice Co., Inc., Houston, Tex., No. 369,069, for rice, rice flour, rice bran and rice polish to be used as cattle feed. Arranged on a diagonal, the stenciled letters "Essar."

Animal Foods Co., doing business as Alert Products Co., San Jose, Cal., No. 373,353, for canned food for dogs, cats, foxes and other carnivorous animals. The word "Chubby."

Charles H. Tuttle, doing business as Top O' The World Farms, Lake George, N. Y.; No. 366,540, for poultry, farm and dairy feeds. "Top O' The World Farms" in block letters.

National Coast Products Corp., Swedesboro, N. J., No. 373,224, for canned dog and cat food. Picture of a dog, and the word "King" in script, against a colored background.

Albers Bros. Milling Co., Portland, Ore., San Francisco, Oakland, Los Angeles, Riverside, and Fresno, Cal., etc., No. 369,318, for stock and poultry feed. The word "Carrotone."

Animal Foods Co., doing business as Teddy Boy Products Co., San Jose, Cal., No. 372,583, for canned foods for dogs, cats, foxes and other carnivorous animals. The words "Teddy Boy" in a fantastic old-English type.

Atlas Canning Co., Inc., doing business as Speedy Sales Co., Glendale, Long Island, N. Y., No. 371,845, for canned food for dogs, cats and carnivorous animals. A galloping puppy dog, and the word "Speedy" against a colored outline.

Feed Prices

The following table shows the closing bid price each week for July futures of standard bran and gray shorts, spot cottonseed meal, soybean oil meal and alfalfa meal in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel.

	Minneapolis Spot Bran	Minneapolis Spot Midds	Kansas City Bran	Kansas City Shorts
Mar. 7	16.00	16.25	13.25	17.50
Mar. 14	16.00	16.00	13.50	18.00
Mar. 21	16.00	16.25	13.40	17.65
Mar. 28	15.25	15.50	13.10	17.50
Apr. 4	15.50	15.75	13.30	17.25
Apr. 11	17.75	17.75	14.00	17.60
Apr. 18	18.50	18.50	14.50	18.50

	St. Louis Bran	St. Louis Shorts	Chicago, Soy Beans	Chicago, Soy Meal
Mar. 7	14.75	18.40	84	23.40
Mar. 14	15.35	18.50	82½	22.40
Mar. 21	15.00	18.35	80½	21.90
Mar. 28	14.60	18.10	79½	21.90
Apr. 4	14.50	18.25	79½	20.50
Apr. 11	15.35	19.00	80	21.00
Apr. 18	15.00	18.75	85	22.40

	Cottonseed Meal Ft. Worth	Cottonseed Meal Memphis	Denver Alfalfa	Chicago Corn
Mar. 7	24.00	20.50	21.00	62½
Mar. 14	24.50	20.00	21.00	62½
Mar. 21	24.50	20.00	21.00	60
Mar. 28	24.50	19.75	21.00	61½
Apr. 4	24.50	20.00	21.00	62
Apr. 11	24.50	20.00	21.00	63
Apr. 18	24.75	21.00	21.00	65

Sperry Flour Co., San Francisco, Cal., No. 371,322 for milled grain products, particularly poultry feed. The word "Surebroiler." No. 369,505 by the same company, for animal food, particularly sheep feed, is the word "Sure-sheep."

C. C. Wonneman & Sons, Mexico, Mo., No. 368,119, for dog food. Picture of a belt, encircling a dog's head, and the words "Wonnie's Health Dog Food (For All Breeds and Ages) mfd. by C. C. Wonneman & Sons, Mexico, Mo."

Lancaster, Inc., Los Angeles, Cal., No. 367,721, for a vitamin concentrate to be added to poultry food, bird food, fur bearing animal food, livestock food, and food for human consumption. In outline lettering, the word "Chick-a-D."

Flaked Food Co., Beloit, Wis., No. 371,428, for food for dogs and other carnivorous animals. A circle around pictures of the heads of two different breeds of dogs, against an escutcheon bearing the word "Derby," against a dotted background showing "12 ozs." and "Dog Flakes."

Corn Belt Supply Co., Sioux City, Ia., No. 365,551, for livestock and poultry feeds. Streaks, as from a setting sun, two shocks of corn in a field, two pumpkins and a belt with a buckle showing the monogram "CB" surrounded by an upright oval bearing the words, "Corn Belt Feeds Livestock and Poultry."

Texas Feed Control Service

In Texas six inspectors during the year maintain a systematic inspection, visiting feed manufacturers, feed dealers, and a considerable number of consumers in order to secure official samples for analysis, weigh packages to prevent selling short-weight feeds, and detect other possible violations of the provisions of the Texas Feed Law. Each inspector files at the office each week an itinerary, which is subject to revision if considered advisable. In addition he is required to submit a daily report of his activities. During the period covered by this report the inspectors have traveled 80,841 miles in performance of their official duties and visited 16,430 firms in 3,435 towns and cities. Several trips have been made from the office for the purpose of carrying on special investigations.

Computed from the sale of feed inspection tags there were 1,235,172 tons of feed sold in the state during the year ended Aug. 31, 1934, or an increase of 177,639 tons over that sold during the previous year. Co-operation with the Food and Drug Administration of the U. S. Department of Agriculture has been continued and control thus exercised over interstate shipments of feed as further protection to Texas purchasers.

Poultry Feeds and Feeding

By Harry M. Lamon & Alfred R. Lee

A book of 247 pages (14 chapters, 23 illustrations), designed to meet the needs of all interested in feeds for poultry. Grains, rations and methods used in every section of the U. S. are discussed.

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Valuing Fish Meal Proteins

Fish meal and other crude proteins can not be broken down completely into amino acids or substances that can be absorbed into the system, is the finding of the Buro of Fisheries in Report No. 30. That portion which is not broken down represents a waste because it is unavailable to the animal. A measure of the digestibility of a fish meal, therefore, shows the proportion of the material that has possible usefulness. Because nitrogen is the characteristic element of proteins, the experimental procedure for determining digestibility involves the quantitative determination of the protein nitrogen in the food consumed by an animal and the nitrogen in the fecal discharge. The proportion of the protein that has been digested can be determined by the difference between the nitrogen intake and the nitrogen loss in the feces after the latter has been corrected for the presence of nitrogen of other than food origin (metabolic fecal N). This correction is made by determining the waste nitrogen in the feces of animals on a known amount of a non-nitrogenous diet. The amount of protein thus lost has been found to be fairly uniform per unit of food consumed.

Information on digestibility is of value to both the producer and consumer of fish meal, but because it indicates possibilities only, it should be accompanied by other data also.

The digested portion of fish meal and other crude proteins does not supply all the various amino acids in exactly the proper proportions for the building process. This results in some surplus amino acids having no use in building. As stated previously, these are used as fuel, but since protein foods are fed primarily for the purpose of building new proteins, utilization of amino acids as energy may be considered a definite loss in the value obtained from the material. It becomes apparent, therefore, that in evaluating the nutritive properties of fish-meal proteins, the proportion of the digested material that is used for building is a factor of most vital importance. It may be seen further why data on digestibility does not give a complete picture, because while good digestibility is necessary to make amino acids available for utilzation, high digestibility will not necessarily indicate that efficient utilization will result.

On the other hand, fish meal is rarely, if ever, fed as a sole source of protein and any deficiency in its amino acids may be at least partially corrected by the proper use of other feedstuffs which will supply the limiting amino acids. This is commonly known as a supplemental effect or action between proteins and will be discussed later.

The important relation between the amount of protein absorbed and the amount utilized can be evaluated by further measurements and calculations of the type previously described. In the preceding discussion on digestibility, it was seen that the amount of protein digested or absorbed by the animal was determined by the difference between the nitrogen intake and the nitrogen loss in the feces after the latter had been corrected for metabolic fecal nitrogen. Likewise, the amount of protein which is utilized by the animal in building body proteins can be determined by the difference between the nitrogen absorbed and the nitrogen discarded in the urine after the latter has been corrected for endogenous urinary nitrogen. This correction is made by determining waste nitrogen in the urine of test animals fed a protein-free diet. The amount lost is directly correlated with body weight. The percentage of the total amount of protein absorbed which is built into the body is known as the "biological value" of the protein.

In animal feeding, fish meals are fed in combination with cereals and cereal by-products and usually some other protein and vitamin rich feedstuffs which are also sources of protein. In the above discussion, it has been seen that certain amino acids were discarded, not because they were without value but because they were left overs after certain combinations were formed. It is entirely possible that when mixed feeds are used, some other food protein might supply a group of amino acids that in combination with the unneeded fishmeal amino acids, make the desired building combinations. Should this happen, some of the materials previously slated for discard could be utilizd. Thus in estimating the value of a fish meal in nutrition, its supplemental effect must not be forgotten. Measures of the food intake and excreted fecal and urinary nitrogen from animals fed different fish meals combined with the same supplementary food materials give a gross measure of the efficiency of the protein that more or less includes the combined effect of digestibility, biological value, and supplemental action.

In the building of cellular tissue there are certain amino acids that are essential to cell growth and cannot be manufactured in the cell. In the absence of even one of these indispensable amino acids no new protein can be formed. Several of the amino acids appearing in tissue proteins, on the other hand, can be formed from other materials; and, therefore, their presence is not essential for the building up of the protein structure of the tissue. The presence, absence, or relative abundance of these essential amino acids have much to do in determining the efficiency with which the numerous absorbed amino acids from the digested food protein are utilized in building tissue. Because of varying demands for essential amino acids due to physiological conditions in animals, the chemical determination of the essential amino acids in food protein cannot be used as a direct measure of the efficiency with which absorbed amino acids will be utilized.

Feeding Pregnant Sows

By Fred Hale of Texas Agr. Exp. Station

Farm grains alone are not adequate for sows during the gestation period. They lack protein, salt, lime and vitamins. Green pasture goes a long way toward providing a suitable ration for pregnant sows. The best substitute for pasture is choice alfalfa hay. One of the best ways to feed it is to place the hay in a slatted feed rack and let the sows eat what they will. The sow will eat from ¾ to 1¼ pounds of hay per day if the grain ration is restricted.

Certain protein supplement such as skim milk, cottonseed meal, tankage, peanut meal, and soy bean meal are necessary in most hog rations. Older sows need less protein than do younger sows. Young sows should receive a protein supplement throughout gestation. Mature sows, when not too thin, can safely be carried on grain, choice alfalfa, and minerals to within six weeks of farrowing. At this time some additional protein should be fed. A gallon of skim milk per sow per day will be satisfactory. If milk is not available, ½ pound of tankage per sow per day may be given. This is good insurance against a pig-eating appetite in the sows. A simple mineral mixture should be kept before the sow. A mixture of equal weight of limestone, bonemeal and salt is satisfactory.

The correct amount of total feed to allow pregnant sows can only be judged by the man who is observing them daily. Gilts and thin sows need somewhat more feed in proportion to live weight than do mature sows in good condition. Somewhere between 1 and 1⅓ pounds of grain daily for each hundred-weight of the sow in addition to alfalfa hay will put the sows in good condition. For a 400-pound sow this would be from 4 to 5 pounds of grain daily.

Pilchard Industry Battles

An intra-industry battle rages between the off-shore and the shore plants of the pilchard fishing industry on the Pacific Coast, both sides of which have bombarded the Pacific Coast feed trade with their contentions.

The California Sardine Products Institute, representing shore plants, contends that unrestricted fishing for pilchard will soon deplete stocks, that off-shore reduction plants have increased, and pay no tax, except in Oregon, where off-shore plants pay a tax of 50c. Federal legislation is urged to curb the off-shore plants.

The Pacific Coast Fisheries, composed of off-shore plants, contend that limiting of catches thru legislation will increase the cost of fish meal.

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Poultry Feeds and Feeding

"Say, Josh, how can you tell the ganders from the geese?"

"Oh, we never bother about that, we just turn 'em all out together and let 'em figure that out for themselves."

The production of eggs by farm flocks on Apr. 1 was about 4 per cent greater than for that date in 1935, and 2 per cent greater than in 1934. Production was smaller, however, than the 5-year April 1 average of the years 1928-1932 by about 7 per cent, and was about 15 per cent less than on April 1 of 1927, the year of peak production. The number of hens and pullets of laying age in farm flocks belonging to Crop Reporters on April 1, 1936, averaged 75.0 per farm compared with 72.9 on April 1, 1935, and a 5-year April average of 82.3 for the years 1928-1932.—U. S. Dept. of Agriculture.

Breeding Mash Formulas

Ordinary grain rations do not promote the hatchability of eggs. For increasing the number of eggs and their hatchability the grain, bran, middlings and meat scrap must be supplemented.

Late formulas supplied by some of the state experiment stations prescribe the following:

New Jersey—1935

100 lbs.	yellow corn meal
100 lbs.	wheat bran
100 lbs.	wheat middlings
100 lbs.	ground heavy oats
50 lbs.	meat scrap (50% protein)
50 lbs.	dry skim milk
10 lbs.	steamed bone meal
5 lbs.	table salt
515 lbs.	

Ohio—1935

20 lbs.	coarsely ground yellow corn
20 lbs.	wheat, coarsely ground, or wheat middlings (shorts)
20 lbs.	finely ground oats
9 lbs.	wheat bran, coarse
20 lbs.	meat scraps, medium (50-55% protein)
5 lbs.	dry skim milk
5 lbs.	alfalfa meal or leaf meal
1 lb.	salt
100 lbs.	

1½ to 2 pints, or the amount suggested by manufacturers, of potent cod liver oil or sardine oil or their equivalents to each 100 pounds of mash when layers are confined indoors. Oyster shells or limestone grit before birds at all times; chopped alfalfa, clover, or soybean hay before birds at all times when available.

Pennsylvania (1936 Ration)

350 lbs.	ground yellow corn
150 lbs.	wheat bran
100 lbs.	ground heavy oats
150 lbs.	wheat middlings
50 lbs.	meat scrap†
50 lbs.	fish meal†
75 lbs.	dry skim milk
75 lbs.	alfalfa meal
10 lbs.	calcium carbonate‡
15 lbs.	cod liver oil or its equivalent§
7 lbs.	salt
1,030 lbs.	

†In place of 50 lbs. of meat scrap and 50 lbs. of fish meal, one may use 100 lbs. of meat scrap or 100 pounds of fish meal.

‡Calcium carbonate refers to finely ground oyster shell, ground limestone of high calcium content or some other good source of calcium. In addition to the calcium carbonate in the mash, it is recommended that a good source of calcium (coarse material) and an insoluble grit be supplied in hoppers at all times.

§From the results of work carried out at this institution, the vitamin D requirements of laying hens were found to be higher than that of chicks. When the consumption of scratch grain exceeds that of mash, cod liver oil or its equivalent should be added daily to either a moist mash or the scratch mixture at the rate of one-half pound to each 100 pounds of all feed consumed. There are various grades of concentrated cod liver oil on the market which are high in vitamin D potency. Follow the manufacturer's recommendations when using this type of product.

Feeding Layers in Batteries

By D. C. Kennard and V. D. Chamberlin of Ohio Exp. Station

Laying batteries continue to command widespread interest. While there are comparatively few larger installations, there are many who are trying out laying batteries on a small scale—in many instances, with home-made equipment. A large number of others await further results and developments before taking up the procedure. From both sources come many inquiries to this Station relative to feeding, management, and behaviour of layers in batteries. This article is an attempt to present the information we have available at this time, along with our experiences and resultant suggestions.

While laying batteries are still in their experimental stage of development, there is already ample evidence to indicate that they are destined to become one of the standard methods of management for layers in the future. The New Jersey, Pennsylvania, and Ohio Agricultural Experiment Stations have reported rather favorable results from their tests with laying batteries. More recently, the Central Experimental Farm, Ottawa, Canada, has reported better egg production and less mortality from the caged layers than from similar layers in floor pens. A battery plant for 5,000 layers has been in successful operation at Mount Whitney Farm in New York for the past 3 years. The Mississippi egg laying contest has completed 2 years and has started its third year with laying batteries. The fact that these and other developments have taken place within 3 to 5 years indicates the rapidity with which laying batteries are coming to the fore.

It was first supposed that batteries for layers would eliminate much of the care and skill in feeding and management required for layers in floor pens. This false impression was soon replaced by the fact that layers in batteries necessitate greater skill in feeding than floor birds. Proper management requires that the birds be given frequent attention and individual observation so that any birds that need to be removed will be detected promptly while yet in good marketable condition and replaced by new recruits. This may seem a simple, easy procedure, but in actual practice few will be able to meet the requirements of time, persistence, and patience needed.

As for the ration for layers in batteries, it appears that a ration adequate for indoor floor birds will also serve for layers in batteries, except that the vitamin D requirements of layers in batteries will often be greater because the floor birds are exposed more or less to direct sunlight. We believe that the layers in batteries also need more fiber, which may be supplied by whole or coarsely ground oats. The oats may be used to the extent of 30 to 40 per cent of an all-mash feed mixture or whole oats may be fed daily in about the amount each layer would consume before the next feeding period.

All-mash or grain and mash rations seem to prove about equally satisfactory. While we have not tried pellets, we see no reason why they should not prove satisfactory and possibly have certain advantages over all-mash or grain and mash, especially if used as a supplement to the other feeds.

The method of feeding we have found very satisfactory is to feed the all-mash or grain and mash morning and evening in just about the amount that would be consumed before the next feeding period.

The main difficulty of feeding layers in individual batteries is that the feed requirements of individual birds vary so greatly that it is a problem to avoid the accumulation of "tailings," or stale feed, which is not palatable and will not be consumed unless or until the bird is forced by hunger to do so. This discourages egg production—hence, the necessity for skill in feeding layers in batteries.

Where the layers can be fed three times daily, a desirable schedule would be to feed fresh mash morning and evening and whole oats at noon. The birds should have free access to a mixture of shells and hard grit in a separate compartment.

Production credit ass'ns lent farmers over $66,000,000 in the first quarter of 1936, the largest amount in any similar period since the organization was started, says S. M. Garwood, Production Credit Commissioner of the Farm Credit Administration. "This spring many merchants and farm supply dealers are doing business on a cash basis with thousands of farmers who had not bought for cash since before the depression."

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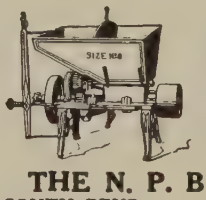

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Breeding Rations

By J. G. HALPIN, and C. E. HOLMES, of Wisconsin Agr. Exp. Station

Every breeding flock should be fed a complete ration thruout the entire fall and winter so that good eggs may be produced during the early spring. The hen has the ability to store certain things but good eggs are never produced when the store is running low. A complete ration furnishes energy, good protein, necessary minerals, and vitamins, in about the right proportion.

The problem of trying to produce a liberal supply of winter eggs and not impair the hatching power of the eggs produced by that individual the following spring was one that we attacked early at the Wisconsin Experiment Station. After many trials with various combinations of feed definite information was secured as to the influence of certain rations on the hatchability of eggs.

In these trials rations were made from combinations of white corn and casein as compared with white corn and casein with pork liver, dried skimmilk, and cod liver oil. White corn and casein gave about the same egg production as white corn and dried skimmilk. A ration of white corn, casein, and pork liver gave decidedly better egg production. A ration of white corn, casein, and cod liver oil also increased egg production over the lot getting white corn and casein.

A white corn, casein ration lacks vitamins A and G, while a yellow corn, casein ration lacks vitamin G. Adding pork liver to the ration supplied both vitamins A and G and improved the hatchability of either a white corn, casein or yellow corn, casein ration. Skimmilk powder supplied vitamin G and thus improved the hatchability of the yellow corn, casein diet but did not show results with white corn, casein because vitamin A was lacking and thus inhibited hatchability.

Vitamin G Needed.—Other trials have shown that rations made from grains, wheat, by-products, meat scrap, oyster shells, and salt may in some instances lack vitamin G. In using products such as middlings and meat scrap, considerable variation of the vitamin content will be found. If the meat scrap used happens to contain some liver tissue then a combination such as the "Big 5."

Endless combinations may be used but the following are sample mixtures that can be depended upon to furnish the necessary nutrients provided the quality of feeds is good. Two feeds may be mixed using exactly the same formula and one be good and one poor. Good quality materials must be used and special attention given to the quality of feeds such as alfalfa leaf meal, cod liver oil, and dried milk. Such feeds are usually present in relatively small amounts so that good quality materials must be used or the flock may suffer from vitamin deficiency.

Suggested Egg Mash Combinations

No. 1—The Big Five—Modified	lbs.	No. 2—The Big Five—Modified	lbs.
Ground yellow corn	100	Ground yellow corn	100
[2]Ground heavy oats	100	[3]Ground heavy oats	100
[4]Pure wheat bran	100	[4]Pure wheat bran	100
[4]Pure standard middlings	100	[4]Pure standard middlings	100
[2]Meat scrap	100	[1]Alfalfa meal	25
Iodized stock salt	5	[2]Meat scrap	75
[6]Cod liver oil	5	[3]Dried milk	25
Milk to drink.		Iodized stock salt	5
Alfalfa hay chaff available from a rack.		[6]Cod liver oil	5

No. 3—Station Breeding Mash	lbs.	No. 4—By-Products Mixture	lbs.
Ground yellow corn	100	[4]Pure wheat bran	100
Ground oats	50	[4]Pure standard middlings	100
[4]Pure wheat bran	100	[1]Alfalfa meal	50
[4]Pure standard middlings	100	[2]Meat scrap	75
[1]Alfalfa meal	50	[3]Dried milk	25
[2]Meat scrap	75	Iodized stock salt	5
[5]Dried milk	25	[6]Cod liver oil	5
Iodized stock salt	5		
[6]Cod liver oil	5		

[1]Either a low fibre, green colored, nicely cured hay meal or good quality leaf meal may be used.

[2]A good grade of tankage may be substituted for the meat scrap.

[3]Ground barley 50 and ground oats 50 may be substituted.

[4]Two hundred pounds ground wheat may be substituted for the wheat bran and middlings if ground wheat is cheaper.

[5]Either dried skimmilk or dried buttermilk may be used. If condensed milk is used three pounds of condensed milk is substituted for one pound of dried milk and may be fed on the mash.

[6]Use either a good grade of cod liver oil, sardine oil, or other material that has been tested and found satisfactory for use with chicks.

A hopper of coarse crushed oyster shell, clam shell, or high calcium limestone should be available at all times, as well as a hopper of granite grit or box of gravel.

When the yellow corn and wheat are available it is desirable to feed wheat as the morning feed and shelled yellow corn in the afternoon. Whole oats, barley, buckwheat, or spelt should be fed from hoppers or troughs. Wheat and corn may be fed in a dry, clean litter if desired.

More grain will be consumed when feeding either No. 1 or No. 4. Mash No. 4 will cost more per 100 lbs. mash but will not cost more per 100 lbs. of ration simply because more whole grain will be consumed. In cold, cloudy weather it may be desirable to double the amount of cod liver oil in No. 1 or No. 4. Usually with the type of mash suggested hens will consume 60 or more pounds of grain while they are eating 40 pounds of mash. When using mixtures such as No. 1 or No. 4 grain consumption may be as high as 80 lbs. of grain to 20 lbs. of mash. When mashes containing less animal protein are used, then relatively more mash must be consumed.

Feed Value of Sorghums

A feeding trial at Kansas Agricultural Experiment Station with fattening calves showed that one pound of ground kafir had practically the same feeding value as one pound of ground corn. In this test calves weighing approximately 450 lbs., fed 180 days on ground kafir, cottonseed meal, alfalfa hay, and silage, gained 424 lbs. with an average daily gain of 2.35 lbs.; while those fed ground corn and the same supplemental feeds and roughage, gained 431 lbs. with an average daily gain of 2.39 lbs.

With fattening lambs it is much the same story and experimental feeding tests show that kafir may be substituted for corn in a grain ration.

There is probably more sorghum grain fed to swine than to other classes of livestock. When experimental results are considered, it is found that hogs also will utilize these grains almost as efficiently as corn and that ground kafir, feterita, or milo is worth about 90 per cent as much as corn for fattening swine.

In the winter of 1930, Atlas sorgo was compared with corn as a grain for fattening hogs. In this test 70-pound pigs fed 110 days on ground Atlas gained 182 pounds at the rate of 1.66 pounds per day. The corn-fed pigs gained 188 pounds at the rate of 1.72 pounds per day. The Atlas was readily consumed by the pigs and was considered to be worth 93.5 per cent as much as corn.

Milo and feterita are a little better feed than kafir, being worth up to 95% as much as corn. Kafir is the least valuable of the three sorghums, generally being worth about 90% as much as corn.

The cane seed from the sweet sorghums is not as palatable to hogs as the grain sorghums. In three trials at the Kansas Agricultural Experiment Station, pigs fed cane seed with a protein supplement gained 1.2 lbs. daily compared with 1.6 lbs. when corn was fed instead of cane seed. The cane seed then was worth only 63% as much as corn and only about 70% as much as kafir. Mixing cane and corn will provide a fairly good ration and the pigs will make rapid gains, but the relative value of the cane seed will remain the same. Cane seed should be ground when fed to hogs.

Annual payments for highways amount to slightly more than one cent per mile of vehicle travel on all highways in Wisconsin, Michigan and Minnesota, according to figures collected by the U. S. Department of Agriculture. In Wisconsin and Michigan the payment is 1.08 cents per mile and in Minnesota 1.1 cents per mile. The actual saving in vehicle operating cost resulting from replacing a dirt road with a smooth, hard surface has been variously estimated and is probably not less than 3 cents a mile.

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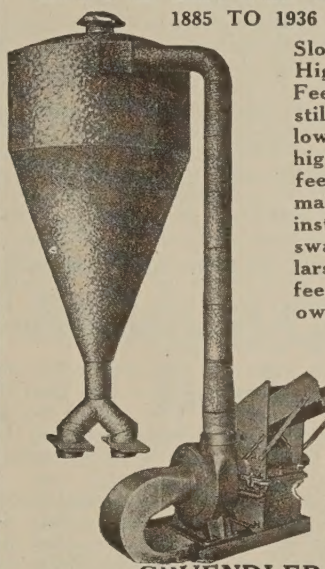

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Butter Color and Index to Vitamin "A"

By EDWARD B. MEIGS, Buro of Dairy Industry

The differences in butter color which can be produced by different kinds of feed are much larger than those which occur among different breeds on the same feed.

The butter color of a given breed of cow is rarely as much as twice that of another breed on the same feed, whereas it is easy to reduce the butter color of an individual cow of any breed to less than one-tenth of the original level by changing her from good pasture to a ration of grain and U. S. No. 3 timothy hay. Changes in yellow color so caused are accompanied by roughly proportional changes in vitamin A activity.

As the changes in butter color produced by feed changes, and also the accompanying changes in vitamin A activity, are so much larger than the breed differences which are not an index of vitamin A activity, the natural yellow color of the milk fat is, in general, a fairly good rough index of its vitamin A activity.

Grinding Milo for Beeves

That it pays to grind milo has been proved in experiments at the Big Spring, Texas, station, where the state and the federal governments co-operated in tests.

Sixty good quality Hereford steer calves, average weight 455 pounds, were divided into four lots of fifteen head each, in a study of the comparative feeding values of (1) whole threshed milo, (2) ground threshed milo, (3) unground milo heads, and (4) ground milo heads. Each of the four lots received cottonseed meal, chopped sumac fodder, and .1 pound per head daily of pulverized limestone. The different lots were fed the same amount of cottonseed meal and practically equal amounts of roughage, but the grain was fed according to appetite. An average of four 65-pound pigs to five calves were used in the lots fed unground grain and of one pig to five calves in the lots fed ground grain.

The lot fed unground threshed milo consumed 90 pounds more milo per calf than the lot fed ground threshed milo, while the lot receiving unground milo heads were fed 188 pounds more than the lot receiving the ground heads.

Total pork and beef gains averaged higher for unground threshed milo feeding than for any other method of grain feeding used, but net returns have been the lowest. High cost of beef gain and uneven finish, although some steers become highly finished, have been the chief factors in making poor returns for this method.

Ground threshed milo has produced the largest beef gain and the highest finish, with the least amount of grain required per cwt. of steer gain. This method of feeding has previously been second only to ground milo heads in net returns, but exceeded that method this year because of larger, cheaper gains, excellent finish, and higher sales prices. However, an average of results for three years does not warrant the expense of threshing milo for finishing baby beeves in the milo producing area, but if high transportation costs are involved, then ground threshed milo becomes the best method for feeding milo grain.

The hog gain per steer was 110 pounds for threshed milo, 27 pounds for ground threshed milo, 111 pounds for milo heads, and 16 pounds for ground milo heads.

These three tests have shown that calves can be fattened on unground milo, and that with hogs following calves, unground grain is converted into more gain, beef plus pork, than if the grain were ground.

In regard to making beef gain and finish, a cheaper and larger gain, more finish, and a higher selling price have given grinding a distinct advantage over not grinding. This advantage is lessened when the calves are followed with pigs, but during this period pork gains and prices for pork have not been sufficient to offset the advantage of the higher finish and selling price of the steers secured by feeding the ground grain.

High Protein Concentrates

By DR. C. W. MCCAMPBELL, Animal Husbandry Department, Kansas State College

The use of cottonseed or linseed meals in rations which are deficient in protein may be justified by savings effected in grain and by the improved quality of cattle which ordinarily results when these products are fed. If concentrates cost two to three times as much as corn the economy in grain will not be important, but bloom and finish of animals at the end of the feeding period will still be factors to consider.

In reporting comparative results of feeding cottonseed and ground corn as fattening feeds to yearlings at the Kansas State College in 1924-'25 the following observations are made: The yearlings received ground corn as a basal ration made slightly greater daily gains than the yearlings receiving the cottonseed meal as a basal ration. However, the yearlings receiving cottonseed meal as a basal ration showed a bit more finish, better coats of hair, and more bloom than the yearlings receiving a basal ration of ground corn and outsold them by 25 cents per hundredweight. On the other hand, the gains where cottonseed meal was fed as a basal ration cost $1.25 per hundredweight more than where ground corn was fed. This experiment indicates that when (1) daily gain, (2) cost of gains, and (3) selling price are taken into consideration, ground corn is worth approximately 95 per cent as much, pound for pound, as cottonseed meal as a fattening feed, and in this connection it should be emphasized that ordinarily its cost is less than 70 per cent of cottonseed meal, pound for pound.

It might be well to mention here that other experiments have shown that cottonseed meal is a very satisfactory protein supplement. When no legume hay, such as alfalfa, clover, sweet clover, or cowpea hay is fed, 4 pounds of cottonseed meal per 1,000 pounds of live weight will be needed as a protein supplement. When a legume hay constitutes a part of the roughage 2½ pounds of cottonseed meal per 1,000 pounds of live weight will suffice, and when a good legume hay constitutes the entire roughage only 1 pound of cottonseed meal per 1,000 pounds of live weight will be needed to supplement the protein.

One of the experiments in the cattle-feeding trials at Manhattan the winter of 1928-1929 was conducted to show relative merits of cottonseed meal, linseed meal and corn gluten meal as protein supplements when fed in addition to corn, alfalfa hay and corn silage. These concentrates were compared singly and in different combinations.

When fed alone results can be summarized as follows:

Linseed meal was first on average daily gain, first in finish, and the lot so fed showed the highest margin of profits per steer.

Corn gluten meal ranked first in cost of 100 pounds gain, second on average daily gain and margin per steer, and was third lot in the matter of finish.

Cottonseed meal was second on finish and third in matters of daily gain, cost of gain and in margin per steer.

Other lots of cattle receiving the same basal ration were fed combinations of concentrates. Linseed meal and corn gluten meal, half and half, proved to best advantage; followed by linseed and cottonseed meals, half and half; cottonseed meal, linseed meal and corn gluten, meal, one-third each; and, finally, by cottonseed meal and corn gluten meal, half and half.

A ranking on margin per steer of these seven lots of cattle shows that linseed meal and corn gluten meal, half and half, made the greatest returns; followed by linseed meal and cottonseed meal, half and half; linseed meal alone; the combination of one-third each of cottonseed, linseed and corn gluten meals; corn gluten meal; cottonseed meal; and cottonseed meal and corn gluten meal, half and half.

Distillery Slop Needs Corn and Tankage

Testing distillery slop as a hog fattening feed, experimenters at the Kentucky Agricultural Experiment Station found it good practice to settle the slop so as to increase its solid content and then to supplement it with corn and tankage.

One lot of 10 hogs started off on thin slop alone, the form in which it comes from the presses and is delivered to farmers, lost in weight, despite the fact that they were consuming nearly four gallons per head daily. The slop then was settled, a third of the liquid skimmed off and corn and tankage added. The hogs gained.

Another lot receiving settled slop alone had gained less than a third of a pound daily per head at the end of 15 weeks. This was less than the other lot gained in the same period.

A third lot received all of the settled slop the hogs would eat and shelled corn at the rate of 50 pounds per barrel of thin slop. They gained for a time and then went off feed. Adding tankage at the same rate, as was done in the first lot, restored the animals' appetites and added weight.—A.W.W.

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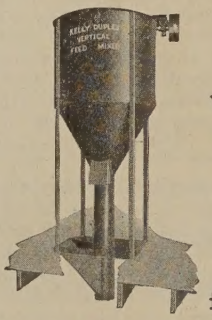

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Swine Rations

By J. S. Coffey of Ohio State University

PALATABILITY.—First of all, a ration must be palatable. While hogs are not so discriminating in this connection, they frequently show enough dislike for a feed to make it impractical as a swine ration. Blighted barley and many varieties of raw soybeans are examples of feeds which do not altogether meet favor with the average hog appetite. Rye is another feed which is not palatable to hogs. Yet all of these feeds can be utilized profitably if included in certain feed combinations so that the unpalatable feature is neutralized by other feeds.

Among the cereal grains the hog probably eats corn with the greatest relish, although wheat is not far behind, if at all. The latter feed is improved in palatability as well as digestibility if coarsely ground. If too finely ground, a sticky, doughy mass results from mastication, making the feed less attractive to the pig. There is, perhaps, no feed more attractive to the pig than cracked hulled oats. However, the whole grain contains too much fiber for the porcine appetite. Even when oats are rolled or coarsely ground the observant feeder will note a liberal discard of oat hulls. How the pig manages to make such a delicate separation of grain from chaff has always been a puzzle to me.

Barley has always been thought of as a palatable hog feed. Personally, I feel certain that it cannot compare with either corn or wheat in this connection, and I doubt if barley is more palatable than oats. In recent years, barley growers have been troubled with a blight which makes the grain quite unpalatable. In cases where palatability was induced by mixing the blighted feed with other grains, nausea among the pigs commonly resulted. Also, except in hulless varieties of barley, the pig has considerable fiber to deal with, something quite disagreeable.

Some of the common by-products resulting from the use of these cereals in various manufacturing processes are wheat shorts and middlings, oats middlings and hulls and hominy feed. All of these by-products find a place in the swine feeder's program. It is doubtful if these by-products are any more palatable than the grains from which they are derived. Except in the case of by-products which contain a high percentage of fiber, I doubt if the by-products are any less palatable than the original grains. Hominy feeds and wheat middlings, for instance, are highly palatable feeds and find universal favor in the eyes of pig feeders providing their cost is reasonable.

Protein supplements vary considerably in palatability. Generally speaking, supplements of animal origin, such as tankage and milk, are relished more readily by the pig than the common protein feeds derived from plant seeds such as soybeans and soybean oil meal, linseed oil meal, cottonseed meal and corn gluten. I do not mean to imply that these latter named feeds are second rate as protein supplements; the fact that they are only slightly inferior in palatability and often much lower in cost, gives them a popular appeal to swine feeders.

Among the forages, it is doubtful if there is one more palatable than alfalfa. The clovers, if succulent, are only slightly, if any, inferior to alfalfa. Young rye is only a step behind.

EFFECTIVENESS. — The second fundamental of the ration which I wish to mention is *effectiveness*. By this I mean the ability on the part of a feed to develop, grow and fatten the animal in the least time possible. Expert feed mixing combined with the natural instincts of the animal have done much to improve the effectiveness of feeds in late years. The appetite instincts of the pig can do nothing in this direction if effective feeds are withheld. Given a choice of wholesome, appropriate feeds, however, the pig does a good job of selecting such feeds in the right proportion to get maximum effectiveness out of them. Experiment stations have directed their forces toward finding out how to make swine feeds more effective. Our experimenters knew for a long time that protein concentrates given in connection with carbohydrate concentrates gave greater efficiency than when carbohydrate concentrates were fed alone. They then discovered that protein concentrates of animal origin were more effective than the plant proteins. Finally, it was discovered that a combination of the two showed more efficiency than either alone.

It is quite possible that we have not arrived at ultimate effectiveness in feed combinations. In fact, the problem offers a challenge to you and me to lead on in the discovery of maximum efficiency in swine feed combinations. In recent years most investigation has been directed toward protein combinations and vitamin activity.

COST.—The third fundamental of a swine ration is the cost. A feed may be palatable and efficient, yet be impractical because it costs too much. Hulled oats offer a good example of this point. The Ohio Experiment Station found upon a comparison of cereal grains in swine feeding that hulled oats produced more rapid gains than any other feed used. Yet it was decided that hulled oats were too expensive for general use because of the drift in hulling and the labor involved in feed preparation. The problem which appeals to me as being the greatest one confronting feed dealers today is to get the feed combination which gives most nearly maximum efficiency at a minimum of cost. Unfortunately, it is a problem in the solution of which I can give you no foolproof formula. It is a constantly shifting problem depending upon relative standard feed prices.

MARKETABILITY OF CARCASS.—The fourth fundamental of a swine ration is its ability to produce a marketable carcass. A feed may be palatable, it may be efficient and cheap, yet of such a nature as to impair the salability of the carcass. Such reasonably priced feeds as soybeans and peanuts are good examples of this point. With this important fundamental in mind, the agricultural experiment station of the University of Illinois recently issued the following warning: "With a record crop of soybeans in sight, Illinois farmers can prevent threatened heavy losses from soft pork if they will utilize this plentiful feed in the form of soybean oil meal rather than as soybeans."

While soybeans cause soft, flabby pork that is of inferior market quality, soybean oil meal used as a supplement for corn in hog rations makes firm pork. At the same time, soybean oil meal makes faster and more economical gains than can be obtained from soybeans.

It is suggested that farmers trade any soybeans which they would feed to hogs for soybean oil meal, thus securing a valuable protein supplement and at the same time avoiding the risk of soft pork losses.

Neither consumers, exporters, packers, feeders nor shippers want soft pork, and consequently it is to the advantage and profit of farmers to do everything possible to avoid it. Packers have warned that the soft pork problem may become so serious as a result of the record soybean crop that "soft hogs will have to be discriminated against. A few loads of such hogs from any one shipping point would be sufficient to give the territory a reputation for inferior pork, with subsequent price penalties to producers."

Garbage is another feed which may have the fundamental of cheapness, yet unless of superior quality lacks in efficiency. In nearly all cases, garbage produces pork of inferior quality.

Washington, D. C.—Comptroller John B. Payne, finance division of the Agricultural Adjustment Administration, reported on Mar. 12 that A. A. A. expenditures during the period May 12, 1933, to Jan. 31, 1936, inclusive, totaled $1,484,023,660.11. Of this $80,754,151.39 was administration expense. Rental and benefit payments included $334,496,109.56 to cotton; $255,758,073.35 to wheat; $397,008,377.27 to corn-hogs, and $9,396,256.25 to rice.

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These claim blanks are printed on bond paper, bound in book form, each book containing 100 originals and 100 duplicates, a two-page index, instructions and summary showing just which claims have not been paid, and four sheets of carbon.

The five forms are well bound in three books, as follows:

411-A contains 100 sets all Form A. Price, $2.00. Weight 3 lbs.

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Grain & Feed Journals
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332 South La Salle St. Chicago, Ill.

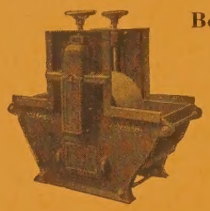
Grain Elevator Equipment

American Electric Lift

requires but 2 h. p. motor to operate; positive self-locking worm gear; wider and heavier frame — no binding; shipped assembled for easy installation.

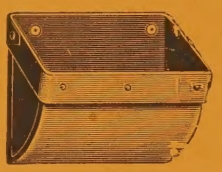
American Grain Elevator Head Drive

This is a compact, fool proof, highly efficient, easily installed leg drive. Installed on leg itself.



Boots, Buckets, Belting

complete elevator leg equipment. Chain drives, V-belt drives, all sizes and shape buckets; bolts.



Pulleys, Sprockets

all sizes, wood and iron. Transmission rope; pillow blocks, babbitted and roller bearing.

Screw Conveyors

right and left flights; conveyor boxes; parts.

Flexible Loading Spouts

sturdy construction and easily handled in car. Parts and liners to fit loading spouts of other makes shipped promptly. Turnheads, distributors, etc.

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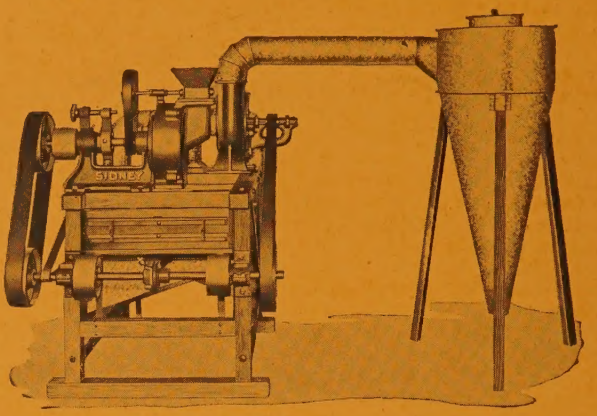
SIDNEY Improved Corn Cracker



Every custom grinder and mixer of feed can materially increase his business if his plant is equipped with an efficient corn cracker and grader. It is easy to build up a demand for its product. The Sidney Corn Cracker and Grader is the latest advance in this type of equipment. Ask us for detailed information.

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SIDNEY, OHIO